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Forecast of the Nation 1988 IV – 1990 III

Georgia State University
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Dr. Donald Ratajczak, Director

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LABOR BOTTLENECKS MAY END EXPANSION BY 1990

Dr. Donald Ratajczak
Director
Economic Forecasting Center

SUMMARY

The economy already has overcome one potential roadblock to further expansion in the form of capacity constraints in selected industries. Late in 1987, six major industries were producing above previous cyclical peaks. As a result, delivery delays lengthened and industrial material prices accelerated. Despite claims that worldwide capacity was sufficient to meet domestic needs at prevailing prices and exchange rates, paper, chemical, rubber, textile, nonferrous metals, and aerospace prices all intensified. However, economic slowing engineered by Federal Reserve restraint and a mild inventory glut abroad of American goods allowed capacity to catch up with demand in many of those industries. Of that group, only chemicals and aerospace continue to operate at cyclical peak capacity levels. However, two other industries: fabricated metals and nonelectrical machinery, also have reached high utilization levels. No significant price pressures have been apparent from these industries, however.

Whether or not supply can keep pace with demand in selected industries soon may be moot, as recent labor market conditions suggest that the natural rate of unemployment may be at hand. Because of structural problems in labor markets, both because of geographic dispersion and educational and occupational experiences of job seekers, employers may prefer finding new employees from existing employment rolls rather than find, train, and absorb the unemployed and new job seekers. Obviously, wages must be bid up to entice workers from other jobs. When employers are more willing to meet their needs through such enticements, the natural unemployment rate probably has been reached. At that point, wages grow more rapidly while employment hardly grows at all. As wages begin accelerating, employers are forced to increase the wages of their existing workers or suffer loss of their good employees to alternative jobs.

Signs that the natural unemployment rate may be approaching are in the quarterly employment cost index, which is 4.7% above previous year levels, as opposed to 3.4% gains a year ago. Also, the hourly earnings index rose 0.8% in October and is now 3.7% above previous year levels, the highest year over year increase in more than four years. Soon, wage inflation will be increasing the inflation stability problems faced by the Federal Reserve.

In the next six months, falling oil prices may reduce inflation, thus shielding the impact of labor market tightness. However, once oil has reached bottom, probably at $10-$11 in early spring, the effects of wage inflation will be more apparent. Furthermore, reduced meat supplies next spring and early summer should add to measured inflation at that time. Thus, 1989 will begin with 4% inflation and end with 5%. Sometime in the summer the Federal Reserve is expected to mount an offense against this inflationary performance, leading to sharply rising interest rates next summer and fall followed by substantial housing market weakness.

Also, the dollar's recent strength has slowed competitive gains achieved by American manufacturing. When wages also begin accelerating, export growth will slow sharply. With interest sensitive sectors showing stress and the export sector slowing, the economy will be ripe for a downturn early in 1990.

In summary, inflation adjusted GNP will slow from 3.8% growth this year to 2.7% next year and only 0.8% in 1990. Inflation as measured by the consumer price index will accelerate from 4.1% this year to 4.6% next year and 5.2% in 1990. The unemployment rate may briefly fall below 5% early next year but will be trending toward 6% by the end of 1990.

Interest rates may fall slightly in the next six months as oil prices decline. After that, however, short-term interest rates may rise by 1.5 percentage points while long-term interest rates should increase a full point by the early months of 1990. Mortgage rates, which could fall slightly below 10% by next spring will exceed 11% the spring after that. A mild recession in 1990 will then begin lowering rates again.

Finally, the dollar will not perform well as rising wage inflation reduces the competitiveness of American industry. The trade weighted dollar index should reach a new low early in 1990 which would be consistent with a yen at 110 and a German mark below 1.65. The dollar eventually will reverse its slide as the recession reduces imports and sharply improves the trade deficit. The deficit on net foreign investment should fall below $100 billion before the end of 1990.

OUTLOOK

Sluggishness that developed in the manufacturing sector during the summer appears to be the result of exports piling up in warehouses abroad. With merchandise exports growing 25%, following four years of minimal growth, shipments simply exceeded absorption. Now that these temporary imbalances appear to have been removed, manufacturing activity is expected to advance again. (About half the 99,000 growth in manufacturing employment in October reflected processing distortions associated with the drought. The other half may be the beginning of this rebound).

Fortunately, the summer pause was economically refreshing, as pressures upon capacity eased and industrial inflation subsided. Excluding food and energy, the consumer price index at annual rates subsided from 5.4% in the first quarter to 4.3% in the spring and only 4.0% in the summer. When the drought sharply increased grocery story prices (by 6% in the twelve months of 1988), the overall CPI rose grudgingly from 4.2% in the winter to only 4.8% in the drought stricken summer. The inflationary scare that surfaced in the winter and again resurfaced in June had again exceeded inflationary reality.

While the drought was creating its problems, a ceasefire in the Persian Gulf increased the ability of both Iran and Iraq to deliver oil to world markets. Furthermore, Iraq may have discovered more oil during the war than originally expected. These increased oil supplies have undermined OPEC production quotas, leading to a break in oil prices. In an effort to forestall further damage to the OPEC production apparatus, Saudi Arabia has also flooded the market with oil. They reason that if

cheaters discover that all their increased production delivers is lower prices from a Saudi response, they may soon learn the folly of cheating. While such policing may temporarily establish order in OPEC production, Iraq has an interest in gaining more revenues than Iran. Therefore, if Iraq can deliver more oil than Iran, it may be satisfied, even if a Saudi response sharply reduces the price received by both Iran and Iraq. Thus, the oil market should remain unsettled, with a downward tendency upon prices, until world demand begins to close the gap with current production capability. In 1989 imported oil may average $13.49 per barrel, down from an estimated $14.59 this year and $17.01 a year ago. A low of between $10 and $11 probably will be reached by early spring.

Falling oil prices will again restrain inflationary pressures through the winter and into the spring. Consumer prices probably will increase less than 4.0% at annual rates until oil prices bottom in the spring. With such modest inflationary pressures and with relatively moderate growth in economic activity from previous Federal Reserve restraint, the need for further Federal Reserve tightening will not be apparent. Therefore, short-term interest rates probably will remain near current levels through the spring. Long-term rates, which otherwise might fall with reduced oil inflation, will be restrained by the stability of short-term rates, although a decline in long-term government yields to 8.5% in the next three to six months is not out of the question.

Unfortunately, the inflationary scare will be smoldering while oil prices are falling. Economic growth should be sufficient to provide further decreases in unemployment rates. As labor markets tighten further, the natural unemployment rate described above will be reached. This will lead to increasing labor market wage pressures. Industries that experience labor bottlenecks also may have trouble organizing production, leading to declines in productivity or, at least, slower advances. Unit labor costs, which increased only 2.7% in 1987, should be growing 5.0% by 1990.

By the second half of next year, rising labor costs, an echo in meat prices from the 1988 drought, and a reverse in oil prices all should combine to generate 5% inflation. The Federal Reserve is expected to respond to this risk by tightening the availability of credit, leading to rising interest rates. (Increased inflation raises the dollar value of inventories, which must be financed. Thus, loan activity increases and interest rates rise). These higher rates, in turn, should slow a housing market that already is being buffeted by reduced household real incomes and a slowing in household formations. Falling housing activity should slow the economy sharply by the end of 1989.

At the same time, previous weakness in oil prices will be visiting a minor repeat of the 1986 slump in the oil patch. Excessive offices, warehouses, and retail space also will exert downward pressures upon non-residential construction. Slower worldwide growth, as many countries shift policies toward restraining inflationary forces, also will impact the expansion of exports. By early 1990, all these forces should combine to generate a mild recession.

In fact, our analysis still only leads to recessionary tendencies rather than an easily definable recession. Continued consumer spending, especially for services, will prevent the consumer sector from significantly contributing to the weakness. Also, as domestic spending falls, imports also tend to decline. In comparison, to 1982, where every dollar of reduced domestic demand led to $1.10 of reduced domestic production, a dollar of reduced spending in 1990 probably will mean only $0.80 of falling production. Of course, there will be delayed effects upon exports as reduced imports slow world economies. Indeed, a mild worldwide recession may develop in 1990.

Finally, housing may again play its countercyclical role by expanding after interest rates begin declining early in 1990. Thus, any recession that develops is not expected to be severe.

On the other hand, the likelihood that labor market bottlenecks can be avoided in the next two years is not very great. In the absence of substantial productivity enhancing investment, which has yet to be observed in this decade, currently prevailing moderate growth rates will continue to lower the unemployment rate until such bottlenecks develop. If, on the other hand, the Federal Reserve pursues an even slower growth policy, such fine-tuning can easily create the conditions already outlined above. Moreover, the Federal Reserve has not previously shown sufficient skill in managing growth to prevent labor and capital market bottlenecks.

Of course, the Federal Reserve could choose to ignore problems created by labor market bottlenecks and wait until higher inflation and a shift in income distribution from capital to labor takes its toll upon economic growth. However, accelerating labor costs reverse the gains achieved in international competitiveness through reduced currency values. Not only will the dollar be vulnerable to further declines, but reduced export penetration could eventually lead to recession anyway, but with a weaker dollar, higher inflation, and higher interest rates than otherwise would have prevailed.

Investment opportunities are difficult to develop in an economy about to be reversed by labor market bottlenecks. Obviously, corporate profits will soon grow more slowly than economic activity. At the same time, interest rates will rise. Thus, stock market investments should be avoided. However, this condition will not develop (certainly not the rising interest rates) until next spring or summer. Therefore, short-term gains in both stocks and bonds are possible However, redeployment of assets to safer territory should occur by summer. The risk probably is slightly less in bonds, but certificates of deposit that mature sometime in the summer of 1990 may do quite well. Of course, rising inflationary pressures also improve the earnings of inflation hedges, like precious metals, until the Federal Reserve begins to do battle with the inflation dragon.

Finally, the dollar probably will weaken during the forecast period. Rising interest rates could strengthen the dollar, but not when these increases are required to thwart rising inflationary pressures. Moreover, the world's ability to absorb American goods should diminish, causing slower improvement in trade deficits than in the past year. Foreign investors will be impatient and demand higher returns. Only by driving the dollar down further, to levels from which a rebound is likely, can these returns be generated without harming domestic economic policies. However, a small recession also will do wonders for trade deficits, as imports almost certainly will fall while exports could continue growing modestly. By the end of 1990, the trade deficit could be down to $60 billion. Without a recession, the deficit probably would remain close to $100 billion.

ASSUMPTIONS

No important budgetary initiatives are anticipated during the first year of the next administration. Thus, assumptions about excise taxes have been deleted from our forecast. Also, no surcharge was anticipated. Unfortunately, this absence of budgetary initiative prevents the exchange of economic policies toward more budgetary stringency and reduced monetary restraint from taking place. In the second year, the administration will be overseeing the recession generated by monetary policy to restrain inflationary pressures and will not pursue aggressive budgetary restraint. Nevertheless, slower growth in defense spending is expected along with some reductions in farm supports. While rising interest rates will prevent Gramm-Rudman targets from being achieved during the next two years, these modest restraints will prevent the deficit from ballooning as the economy slips into recession. Even so, the deficit in 1990 will be about $5 billion higher than in 1988 even with such spending constraints.

Monetary policy is expected to remain accomodative until inflationary pressures intensify by mid 1989. Then monetary restraint will become evident until the recession surfaces early in 1990. These assumptions are contained in the monetary aggregates exhibited in table 6.

Most of the budgetary assumptions are contained in table 5, but the impact of those assumptions is basically a modest restraint upon expenditures and no significant revenue initiatives. There also is expected to be no significant change in the tax treatment of capital, despite campaign rhetoric about re-enacting a capital gains provision. The tax reform act of 1986 was passed on the assumption that eliminating the capital gains provision would raise revenues. If reviving capital gains also raises revenues, as some claim, then the tax act was a tax cut that requires further adjustments. Thus, Congress will ignore the entire issue by ignoring any request to change the capital gains tax.

Other forecast assumptions are as follows:

a. Cost-of-living adjustments for government programs are not expected to be modified. After a 4% adjustment in January 1989, the cost-of-living adjustment is expected to be 4.5% in January 1990.

b. Oil barrel imports are expected to increase by 9.0% in 1988 and a further 0.5% in 1989 before declining slightly in 1990. Oil prices should fall from $14.59 in 1988 to $13.49 in 1989 before rising to $16.50 in 1990. No changes in excise taxes were assumed.

c. No significant trade restraint legislation was expected to become law. The free trade pact with Canada was not expected to become enacted by Canada.

d. The wage base for social security was assumed to be $48,000 in 1989 and $51,500 in 1990. Already enacted law increases the social security rate to 7.70 percent for employer and employee in 1990. The social security surpluses were expected to be consolidated with the medicare deficits. Further taxes on social security payrolls or benefits were not assumed.

e. World trade is expected to grow 5% in 1988, 4% in 1989 and 3.5% in 1990.

f. No significant work stoppages were assumed.

g. Minimum wage legislation was expected to be enacted increasing the minimum to $4.55 over three years with effectiveness in 1990. Legislated benefits for health and childcare also were assumed to be effective in 1990 at a cost of 0.3% of labor costs per year.

CONCLUSION

Slower economic growth apparently has eased the industrial inflation that capacity bottlenecks were creating in several industries. However, economic growth has remained sufficiently robust to continue reducing the unemployment rate. Now, signs are beginning to show the approach of the natural unemployment rate. If so, the Federal Reserve either will need to engineer even slower growth or must tolerate the increased inflation that higher wage costs will bring. Because oil prices currently are falling, monetary policy is not expected to respond until inflationary pressures again intensify next spring. By that time, labor market bottlenecks will be sufficient to generate more than 5% inflation. In order to extricate the economy from such rising costs, higher interest rates may be accepted and a mild recession may ensue early in 1990.

For 1989 the outlook still appears sanguine, with real output growing 2.7% and inflation as measured by the CPI growing a still moderate 4.6%. However, rising interest rates later in the year will send housing reeling while nonresidential construction also will be correcting from an overbuilt condition. Even exports will grow more slowly, although the ensuing recession should reduce imports and improve our trade balances. While recessionary conditions definitely appear on the horizon for 1990, the 1989 economic climate still appears to be acceptable.

Table 1.

U.S. Expenditures
for 1988-II and 1988-III with Forecasts for 1988-IV through 1990-III

Georgia State University
College of Business Administration
Economic Forecasting Center
November 1988

	Period (Quarter Year)										Percentage Change			Annual Rate		
	II 88	III 88	IV 88	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	88/87	89/88	90/89	1988	1989	1990
1. Personal Consumption	3194.6	3257.6	3301.3	3356.5	3415.3	3468.8	3520.7	3578.2	3636.8	3699.8	6.9	6.8	6.6	3220.4	3440.3	3667.5
2. Percent Change(AR)	8.8	8.1	5.5	6.9	7.2	6.4	6.1	6.7	6.7	7.1						
3. Durable Goods	449.8	453.6	455.1	463.7	467.7	470.4	471.6	471.4	474.9	481.9	6.5	4.3	2.0	449.1	468.4	477.8
4. Autos, Trucks & Parts	208.7	211.0	212.1	217.1	218.1	219.4	220.0	217.8	220.4	226.2	6.5	4.9	1.9	208.5	218.7	222.8
5. Other Durable Goods	241.1	242.6	243.0	246.6	249.6	251.0	251.6	253.6	254.5	255.7	6.4	3.8	2.1	240.6	249.7	255.0
6. Nondurable Goods	1036.6	1057.6	1067.9	1077.9	1097.7	1113.1	1129.1	1147.4	1164.7	1181.0	4.7	5.7	6.2	1044.6	1104.5	1172.8
7. Services	1708.2	1746.4	1778.3	1814.9	1849.9	1885.3	1920.0	1959.4	1997.2	2036.9	8.4	8.2	8.0	1726.8	1867.5	2017.0
8. Pers Cons less Services	1486.4	1511.2	1523.0	1541.6	1565.4	1583.5	1600.7	1618.8	1639.6	1662.9	5.2	5.3	4.9	1493.7	1572.8	1650.5
9. Percent Change(AR)	9.2	6.8	3.2	5.0	6.3	4.7	4.4	4.6	5.2	5.8						
10. Pvt Domestic Investment	758.1	764.4	768.2	783.7	783.1	781.3	788.5	781.5	755.9	731.5	7.1	2.7	-4.1	763.5	784.2	751.8
11. Residential Structures	226.5	227.6	226.4	228.0	229.1	230.9	229.3	219.4	210.9	213.8	-0.1	1.1	-6.6	226.8	229.3	214.1
12. Other Structures	142.3	143.3	142.9	144.2	144.4	143.4	143.9	143.4	144.3	144.3	1.9	1.3	0.2	142.2	144.0	144.2
13. Producer's Durables	345.5	350.5	355.7	361.9	365.9	370.1	373.9	374.0	374.2	373.2	12.5	6.4	1.8	345.8	368.0	374.6
14. Change in Inventories	43.7	42.9	43.2	49.6	43.7	36.9	41.4	44.7	26.5	0.2				48.8	42.9	17.9
15. Chg in Nonfarm Inv	33.1	35.7	45.1	38.8	33.5	38.2	40.5	38.5	22.2	-1.6				40.8	37.8	14.4
16. Net Exports	-90.4	-84.9	-88.8	-78.6	-68.5	-61.7	-59.0	-61.1	-52.9	-40.5				-94.1	-67.0	-48.3
17. Exports	508.0	526.3	531.1	550.6	570.8	585.5	597.1	609.2	619.1	631.8	19.9	12.2	8.7	513.3	576.0	626.1
18. Imports	597.9	611.2	619.9	629.2	639.3	647.2	656.1	670.3	672.0	672.3	10.2	5.9	4.8	607.1	643.0	674.0
19. Government Purchases	961.6	962.4	973.7	1005.2	1018.0	1032.8	1050.9	1068.1	1077.2	1089.7	3.9	6.9	5.8	960.7	1026.7	1085.9
20. Federal Purchases	382.2	373.4	378.0	400.2	403.5	409.9	419.1	426.7	424.8	427.8	-1.1	8.0	5.1	377.8	408.2	429.2
21. Defense	298.8	294.1	293.3	300.3	303.3	303.8	308.3	314.4	315.6	317.1	0.3	2.6	4.4	296.2	303.9	317.2
22. Non-defense	83.4	79.3	84.7	99.9	100.2	106.1	110.8	112.3	109.2	110.7	-5.7	27.6	7.4	81.7	104.3	112.0
23. State and Local	579.4	589.0	595.7	605.0	614.5	622.9	631.8	641.4	652.4	661.9	7.4	6.1	6.2	582.9	618.6	656.8
24. Gross National Product	4823.8	4899.5	4954.4	5066.8	5147.9	5221.2	5301.1	5366.7	5417.0	5480.5	7.2	6.9	5.3	4850.6	5184.3	5457.1
25. Net Change(amount)	99.3	75.7	54.9	112.4	81.1	73.3	79.9	65.6	50.3	63.5				323.9	333.7	272.9
26. % Chg GNP(curr $)(AR)	8.7	6.4	4.6	9.4	6.6	5.8	6.3	5.0	3.8	4.8				7.2	6.9	5.3
27. Gr Nati Prod (1982 $)	3985.2	4007.3	4019.3	4067.3	4089.4	4107.8	4129.6	4129.9	4120.9	4125.1	3.8	2.7	0.8	3992.0	4098.5	4130.7
28. % Chg GNP(1982 $)(AR)	3.0	2.2	1.2	4.9	2.2	1.8	2.1	0.0	-0.9	0.4				3.8	2.7	0.8
29. Implicit Price Deflator	121.0	122.3	123.3	124.6	125.9	127.1	128.4	129.9	131.5	132.9	3.3	4.1	4.5	121.5	126.5	132.1
30. % Chg Price Deflator(AR)	5.5	4.4	3.2	4.3	4.2	3.9	4.1	4.9	4.9	4.2				3.3	4.1	4.5
31. Final Sales(curr $)	4780.1	4856.6	4911.2	5017.2	5104.2	5148.3	5259.7	5322.0	5390.5	5480.0	7.0	6.9	6.1	4801.8	5132.4	5447.8
32. Net Change(amount)	120.9	76.5	54.6	106.0	87.0	44.1	111.4	62.3	68.5	89.5				314.3	330.6	315.4
33. Final Sales(1982 $)	3949.9	3973.5	3980.3	4032.6	4052.1	4074.4	4092.5	4091.1	4096.4	4122.6	3.6	2.9	1.2	3948.5	4062.9	4112.8

Table 2.

U.S. Real Expenditures
for 1988-II and 1988-III with Forecasts for 1988-IV through 1990-III

Georgia State University
College of Business Administration
Economic Forecasting Center
November 1988

	Period (Quarter Year)										Percentage Change			Annual Rate		
	II 88	III 88	IV 88	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	88/87	89/88	90/89	1988	1989	1990
1. Personal Consumption	2579.0	2601.3	2607.4	2623.9	2635.9	2646.2	2654.4	2662.3	2670.6	2685.4	2.6	2.1	1.4	2586.9	2640.1	2678.0
2. Percent Change(AR)	3.0	3.5	0.9	2.6	1.8	1.6	1.2	1.2	1.3	2.2						
3. Durable Goods	410.6	411.0	410.6	415.9	417.1	416.7	415.6	412.7	412.4	415.7	4.5	2.0	-0.6	408.3	416.3	413.9
4. Autos, Trucks & Parts	179.0	179.5	179.3	182.6	182.4	181.6	180.9	178.4	179.3	182.9	4.4	2.3	-0.6	177.8	181.9	180.7
5. Other Durable Goods	231.6	231.5	231.3	233.3	234.7	235.1	234.7	234.3	233.1	232.8	4.5	1.7	-0.6	230.5	234.5	233.2
6. Nondurable Goods	893.6	901.7	901.0	902.1	905.3	907.7	909.0	911.4	912.6	916.8	0.8	1.0	1.0	897.3	906.0	914.7
7. Services	1274.8	1288.5	1295.8	1305.9	1313.5	1321.8	1329.8	1338.2	1345.6	1352.9	3.4	2.8	2.4	1281.3	1317.8	1349.4
8. Pvt Domestic Investment	715.1	719.7	727.1	735.9	733.4	730.8	733.4	722.5	698.8	674.7	7.1	1.5	-5.5	722.7	733.4	693.3
9. Residential Structures	189.6	190.2	188.7	189.2	189.5	189.9	187.5	177.9	169.7	170.6	-2.9	-0.3	-9.2	189.5	189.0	171.7
10. Other Structures	125.0	125.5	124.6	125.1	124.7	123.2	122.9	121.8	122.0	121.2	-0.6	-0.6	-2.0	124.8	124.0	121.5
11. Producer's Durables	365.1	370.3	374.8	379.3	381.9	384.3	385.9	384.0	382.6	380.4	14.2	4.9	-0.2	364.9	382.9	382.2
12. Change in Inventories	35.3	33.8	39.0	42.3	37.3	33.4	37.1	38.8	24.5	2.5				43.5	37.5	17.1
13. Chg in Nonfarm Inv	30.1	34.0	40.3	34.7	30.0	34.3	36.5	34.3	21.4	1.3				39.1	33.9	14.6
14. Net Exports	-92.6	-94.9	-101.4	-92.2	-82.6	-71.6	-71.2	-69.2	-60.5	-48.2				-99.5	-79.4	-56.5
15. Exports	496.9	507.0	505.8	519.9	534.5	542.6	547.8	554.3	558.3	564.1	16.6	7.5	4.7	499.0	536.2	561.6
16. Imports	589.5	601.9	607.2	612.1	617.1	618.7	619.0	623.5	618.8	612.3	7.5	3.1	0.0	598.4	616.7	616.8
17. Government Purchases	783.8	781.1	786.9	799.7	802.7	806.9	813.0	814.3	812.0	813.2	0.2	3.0	1.1	782.1	805.6	814.7
18. Federal Government	331.6	326.1	330.2	342.1	342.0	345.6	350.6	350.3	345.1	345.1	-3.0	4.1	0.7	328.9	345.1	347.6
19. Federal Purchases	207.8	202.0	205.6	217.5	217.5	220.9	225.5	225.2	220.1	220.0	-4.9	7.6	1.0	204.8	220.4	222.5
20. Value Added	123.8	124.1	124.6	124.6	124.5	124.7	125.1	125.1	125.0	125.1	0.5	0.5	0.4	124.1	124.7	125.2
21. State and Local Govt	452.3	455.0	456.0	457.6	460.6	461.3	462.4	464.0	466.9	468.1	2.7	1.7	1.4	453.0	460.5	467.1
22. State & Local Purch	202.4	204.0	204.5	205.3	207.1	207.2	207.3	208.1	210.1	210.7	4.1	2.0	1.5	202.7	206.7	209.9
23. Value Added	249.9	251.0	251.5	252.3	253.5	254.1	255.1	255.9	256.8	257.4	1.6	1.4	1.3	250.4	253.8	257.1
24. Gross National Product	3985.2	4007.3	4019.3	4067.3	4089.4	4107.8	4129.6	4129.9	4120.9	4125.1	3.8	2.7	0.8	3992.0	4098.5	4130.7
25. % Chg GNP(1982 $)(AR)	3.0	2.2	1.2	4.9	2.2	1.8	2.1	0.0	-0.9	0.4						
26. Final Sales Demand	3949.9	3973.5	3980.3	4025.0	4052.1	4074.4	4092.5	4091.1	4096.4	4122.6	3.6	2.9	1.3	3948.5	4061.0	4113.6
27. % Chg(1982 $)(AR)	6.3	2.4	0.7	4.6	2.7	2.2	1.8	-0.1	0.5	2.6						
28. Gross Domestic Product	3967.0	3987.7	4000.0	4049.3	4071.4	4092.0	4112.9	4116.1	4104.8	4109.0	4.0	2.7	0.8	3972.8	4081.4	4115.0
29. Government Contribution	373.7	375.1	376.1	376.9	378.0	378.8	380.2	381.0	381.8	382.5	1.2	1.1	1.0	374.4	378.5	382.3
30. Private Domestic Product	3593.3	3612.6	3623.9	3672.4	3693.4	3713.2	3732.7	3735.1	3723.0	3726.5	4.3	2.9	0.8	3598.4	3702.9	3732.7
31. % Chg(1982 $)(AR)	3.4	2.2	1.3	5.5	2.3	2.2	2.1	0.3	-1.3	0.4						

Table 3.

Income Related U.S. GNP Components
for 1988-II and 1988-III with Forecasts for 1988-IV through 1990-III

Georgia State University
College of Business Administration
Economic Forecasting Center
November 1988

	Period (Quarter Year)										Percentage Change			Annual Rate		
	II 88	III 88	IV 88	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	88/87	89/88	90/89	1988	1989	1990
1. Compensation of Employees	2874.0	2931.1	2977.9	3040.2	3088.8	3137.0	3183.0	3236.6	3277.4	3324.1	8.1	7.3	6.1	2899.9	3112.3	3302.7
2. Wages and Salaries	2410.0	2460.0	2500.1	2549.9	2592.0	2634.0	2673.4	2712.6	2746.7	2785.9	8.2	7.4	6.0	2432.2	2612.3	2768.2
3. Manufacturing Ind	517.4	526.1	533.0	542.0	548.6	554.9	559.8	564.7	568.3	572.0	6.4	5.7	3.5	521.5	551.3	570.5
4. Other Producing Ind	171.7	175.3	176.9	178.6	179.9	180.8	181.2	177.9	176.0	177.3	8.2	4.4	-1.6	172.6	180.1	177.2
5. Distributive Industries	572.1	585.7	596.9	608.7	620.4	631.7	642.9	654.1	663.9	674.6	8.8	8.2	7.0	578.2	625.9	669.8
6. Service Industries	705.9	723.9	739.1	757.9	774.2	792.5	809.0	826.8	843.0	861.0	10.4	9.7	8.8	714.1	783.4	852.4
7. Military Compensation	75.7	75.8	76.6	79.4	79.9	79.9	80.7	83.3	83.7	83.7	3.7	5.4	4.8	75.9	80.0	83.8
8. Civilian Government	367.2	373.2	377.6	383.3	389.0	394.2	399.8	405.8	411.8	417.3	6.6	5.9	5.9	369.9	391.6	414.5
9. Supplements to W & S	464.0	471.1	477.8	490.3	496.8	503.0	509.6	524.0	530.7	538.2	7.5	6.9	6.9	467.7	499.9	534.5
10. Proprietors Income	328.8	319.3	332.6	339.2	339.9	345.3	345.7	345.1	344.4	345.2	4.2	5.0	0.7	326.2	342.5	345.1
11. Business & Professional	285.3	290.2	294.3	297.6	299.4	301.6	302.4	303.6	304.1	305.7	6.4	4.5	1.6	287.3	300.3	305.0
12. Farm Proprietors	43.4	29.0	38.3	41.6	40.5	43.7	43.3	41.5	40.3	39.5	-9.6	8.8	-5.1	38.9	42.3	40.1
13. Rental Income	19.1	20.0	20.3	20.8	21.0	21.4	21.2	21.5	21.6	22.6	8.3	5.6	4.4	20.0	21.1	22.0
14. Net Interest	380.6	396.5	403.3	411.2	416.9	422.8	434.3	444.1	454.6	465.9	9.9	8.4	9.4	388.6	421.3	460.8
15. Corporate Profits(adj)	326.5	320.7	304.2	312.4	317.8	322.4	322.5	317.5	307.3	301.7	2.1	0.6	-3.7	316.9	318.8	307.1
16. National Income	3928.8	3987.6	4038.3	4123.8	4184.4	4248.9	4306.7	4364.8	4405.3	4459.5	7.4	6.7	5.3	3951.4	4216.0	4437.4
17. Indirect Business Tax	385.8	391.3	397.4	403.4	409.7	415.9	421.6	427.9	434.6	441.6	6.1	6.2	6.1	388.5	412.7	437.9
18. Capital Consumption Adj	-20.9	-18.0	-14.6	-10.7	-7.5	-3.8	-0.3	-1.9	-3.4	-4.6				-19.0	-5.6	-2.6
19. Capital Cons. Allowance	524.1	526.0	528.4	531.3	535.3	539.8	545.2	550.1	555.3	561.2	3.4	2.5	3.8	524.8	537.9	558.4
20. Business Transfers	30.3	31.1	31.8	32.6	33.4	34.2	35.1	35.9	36.7	37.5	9.1	10.2	9.8	30.7	33.8	37.1
21. Net Govt. Subsidies	-19.2	-8.0	-8.9	-6.4	-6.5	-4.9	-6.0	-4.6	-6.1	-7.7	-25.3	-56.5	16.9	-13.7	-6.0	-7.0
22. Statistical Discrepancy	-4.3	-10.5	-18.0	-7.2	-0.9	-8.9	-1.2	-5.5	-5.4	-7.0				-11.4	-4.6	-4.7
23. Gross National Product	4823.8	4899.5	4954.4	5066.8	5147.9	5221.2	5301.1	5366.7	5417.0	5480.5	7.2	6.9	5.3	4850.6	5184.3	5457.1

Table 4.

Derivation of U.S. Personal Income
for 1988-II and 1988-III with Forecasts for 1988-IV through 1990-III

Georgia State University
College of Business Administration
Economic Forecasting Center
November 1988

	Period (Quarter Year)										Percentage Change			Annual Rate		
	II 88	III 88	IV 88	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	88/87	89/88	90/89	1988	1989	1990
1. National Income	3928.8	3987.6	4038.3	4123.8	4184.4	4248.9	4306.7	4364.8	4405.3	4459.5	7.4	6.7	5.3	3951.4	4216.0	4437.4
Less:																
2. Adj. Corporate Profits	326.5	320.7	304.2	312.4	317.8	322.4	322.5	317.5	307.3	301.7	2.1	0.6	-3.7	316.9	318.8	307.1
3. Social Insurance	441.0	448.3	454.3	471.7	477.7	483.4	489.1	509.7	514.7	521.1	11.3	8.2	7.8	444.2	480.5	518.2
Plus:																
4. Government Transfers	552.5	556.4	561.9	579.7	585.5	591.8	598.3	617.1	624.4	632.2	6.5	6.2	6.7	554.4	588.8	628.2
5. Social Security, etc	300.4	303.2	305.5	317.4	320.2	322.8	325.1	337.9	340.5	343.3	6.7	6.5	6.4	301.8	321.4	341.9
6. Unemployment Benefits	13.4	13.7	13.6	13.3	13.0	13.0	13.2	13.5	14.1	15.1	-6.7	-3.8	10.5	13.7	13.1	14.5
7. Veterans Benefits	17.1	17.0	17.1	17.3	17.4	17.5	17.6	17.9	17.9	18.1	2.6	2.3	3.3	17.1	17.5	18.0
8. Govt Empl Retirement	82.3	81.7	83.3	85.9	87.6	89.1	91.2	94.0	95.6	97.2	8.2	8.0	9.2	81.9	88.5	96.6
9. A. F. D. C.	17.1	17.0	17.1	17.4	17.3	17.5	17.6	17.9	18.0	18.0	1.8	2.5	3.2	17.0	17.5	18.0
10. Other Govt Transfers	122.2	123.7	125.3	128.2	130.0	131.9	133.6	135.9	138.3	140.5	18.5	6.5	6.4	122.9	130.9	139.2
11. Business Transfers	30.3	31.1	31.8	32.6	33.4	34.2	35.1	35.9	36.7	37.5	9.1	10.2	9.8	30.7	33.8	37.1
12. Interest Transfers	183.1	182.8	185.2	185.9	188.9	190.8	193.7	195.3	198.0	198.5	5.4	3.8	4.5	182.9	189.8	198.3
13. Personal Dividends	95.0	97.3	99.1	101.0	102.8	104.8	106.7	108.6	110.5	111.9	8.6	7.9	7.1	96.2	103.8	111.2
Equals:																
14. Personal Income	4022.4	4086.0	4157.8	4238.6	4299.5	4364.7	4428.9	4494.5	4552.9	4616.8	7.3	6.9	5.9	4054.4	4332.9	4587.2
Less:																
15. Personal Tax Payments	601.0	587.1	601.2	609.7	621.0	639.3	652.3	655.6	664.3	682.6	3.7	6.6	7.0	591.3	630.6	674.7
Equals:																
16. Personal Disposable Inc	3421.5	3498.9	3556.6	3628.9	3678.5	3725.4	3776.6	3838.9	3888.6	3934.2	7.9	6.9	5.7	3463.2	3702.4	3912.5
Less:																
17. Personal Consumption	3194.6	3257.6	3301.3	3356.5	3415.3	3468.8	3520.7	3578.2	3636.8	3699.8	6.9	6.8	6.6	3220.4	3440.3	3667.5
18. Other Outlays	99.0	101.0	102.8	104.3	105.8	107.3	109.1	110.5	112.0	113.5	7.1	6.5	5.8	100.1	106.6	112.9
Equals:																
19. Personal Savings	127.8	140.3	152.5	168.1	157.4	149.3	146.8	150.2	139.8	120.9	36.8	9.0	-14.8	142.6	155.4	132.4
20. Savings Rate(% AR)	3.7	4.0	4.3	4.6	4.3	4.0	3.9	3.9	3.6	3.1	26.2	2.4	-18.9	4.1	4.2	3.4

Table 5.

U.S. Federal Government Activity
for 1988-II and 1988-III with Forecasts for 1988-IV through 1990-III

Georgia State University
College of Business Administration
Economic Forecasting Center
November 1988

	Period (Quarter Year)										Percentage Change			Annual Rate		
	II 88	III 88	IV 88	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	88/87	89/88	90/89	1988	1989	1990
1. Government Receipts	983.0	976.0	987.7	1008.6	1025.0	1049.6	1069.0	1085.7	1088.0	1107.6	6.3	6.5	6.2	974.4	1038.1	1102.3
2. Personal Tax & Nontax	425.0	409.0	418.9	422.8	430.2	445.2	454.1	453.5	458.5	473.6	2.2	5.7	6.6	414.4	438.1	467.2
3. Corporate Profits Tax	111.7	112.8	108.1	108.7	112.5	115.7	121.1	119.4	112.1	110.8	3.9	4.1	0.1	110.0	114.5	114.6
4. Indirect Business Tax	55.9	57.2	58.6	59.2	59.5	60.3	60.6	61.3	62.1	62.9	5.3	5.3	4.1	56.9	59.9	62.4
5. Social Security Contributions	390.3	397.0	402.1	417.9	423.1	428.4	433.2	451.5	455.3	460.3	12.0	8.3	7.6	393.2	425.7	458.1
6. Government Expenditures	1116.3	1098.9	1115.2	1148.6	1159.2	1173.3	1197.3	1221.2	1230.4	1242.6	3.2	5.5	6.1	1109.1	1169.6	1240.6
7. Purchases of Goods and Services	382.2	373.4	378.0	400.2	403.5	409.9	419.1	426.7	424.8	427.8	-1.1	8.0	5.1	377.8	408.2	429.2
8. Defense	298.8	294.1	293.3	300.3	303.3	303.8	308.3	314.4	315.6	317.1	0.3	2.6	4.4	296.2	303.9	317.2
9. Durables	84.2	80.8	79.3	80.6	81.8	81.5	83.3	84.0	83.8	84.3	-8.7	-0.3	3.4	82.0	81.8	84.6
10. Nondurables	11.4	11.0	10.9	11.2	11.0	10.9	11.3	11.6	11.9	12.1	5.0	0.7	8.4	11.0	11.1	12.0
11. Military Payroll	75.7	75.8	76.6	79.4	79.9	79.9	80.7	83.3	83.7	83.7	3.7	5.4	4.8	75.9	80.0	83.8
12. Civilian Payroll	37.0	37.0	37.3	38.4	38.6	38.7	39.1	40.4	40.7	40.9	3.9	4.2	5.5	37.1	38.7	40.8
13. Other Services	83.1	82.2	82.0	83.3	84.5	85.3	86.6	87.5	87.8	88.3	5.2	2.4	4.0	83.0	84.9	88.3
14. Structures	7.5	7.2	7.2	7.4	7.5	7.5	7.3	7.6	7.7	7.8	-1.4	4.2	3.3	7.1	7.4	7.7
15. Nondefense	83.4	79.3	84.7	99.9	100.2	106.1	110.8	112.3	109.2	110.7	-5.7	27.6	7.4	81.7	104.3	112.0
16. Durables	4.8	4.6	4.6	4.7	4.8	4.9	5.1	5.1	5.2	5.2	12.0	4.8	7.2	4.6	4.9	5.2
17. Nondurables	-8.2	-11.7	-6.5	6.3	5.6	10.4	13.9	13.2	9.1	9.8				-8.9	9.1	11.3
18. CCC Inv. Change	-16.8	-19.7	-14.3	-1.7	-2.2	2.7	5.9	5.0	0.6	1.1				-17.1	1.2	2.3
19. Other Nondurables	8.6	8.0	7.8	8.0	7.8	7.7	8.0	8.2	8.5	8.7	26.2	-4.0	9.3	8.2	7.9	8.6
20. Compensation	44.7	45.1	45.5	47.1	47.5	47.8	48.1	49.7	50.1	50.4	6.5	6.2	5.5	44.8	47.6	50.2
21. Other Services	34.1	33.3	33.0	33.5	34.1	34.7	35.4	35.8	36.3	36.9	15.3	3.8	6.5	33.2	34.4	36.7
22. Structures	7.9	8.0	8.1	8.3	8.2	8.3	8.3	8.5	8.5	8.4	-7.1	5.1	2.1	7.9	8.3	8.5
23. Transfer Payments	437.6	440.4	447.4	460.7	463.2	467.6	476.2	490.5	495.9	501.6	6.2	6.1	7.0	440.0	466.9	499.7
24. Grants-In-Aid to State and Local Govt	110.4	109.4	110.3	109.8	111.2	113.0	113.8	113.3	113.7	114.2	7.4	1.5	1.9	110.3	112.0	114.1
25. Net Interest Paid	152.1	152.8	155.6	156.3	159.4	162.2	166.4	170.0	173.6	174.2	6.7	5.6	8.1	152.6	161.1	174.1
26. Deficit of Government Enterprises	34.0	22.8	23.9	21.6	21.9	20.6	21.8	20.7	22.4	24.3	-12.2	-24.5	8.4	28.4	21.5	23.3
27. Federal Surplus	-133.3	-122.9	-127.5	-140.0	-134.2	-123.7	-128.3	-135.5	-142.4	-135.0				-134.7	-131.6	-138.2
28. State & Local Surplus	56.2	52.4	53.2	55.3	57.7	60.2	63.0	63.3	60.9	60.9				54.4	59.1	62.2
29. Total Government Surplus	-77.1	-70.5	-74.3	-84.7	-76.5	-63.5	-65.3	-72.2	-81.5	-74.1				-79.4	-72.5	-76.0
30. Federal Debt held by Individuals	1776.6	1802.5	1843.8	1880.3	1896.0	1917.6	1957.7	1994.4	2028.6	2051.8	7.0	6.3	6.8	1800.3	1912.9	2042.4

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Table 6.

Selected Economic Variables in the U.S. Economy
for 1988-II and 1988-III with Forecasts for 1988-IV through 1990-III

Georgia State University
College of Business Administration
Economic Forecasting Center
November 1988

	Period (Quarter Year)										Percentage Change			Annual Rate		
	II 88	III 88	IV 88	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	88/87	89/88	90/89	1988	1989	1990
PRIVATE ECONOMY																
1. Change in Private Hourly Wage Costs(AR)	4.5	5.3	4.5	5.4	4.6	4.9	5.0	6.1	5.0	5.0	4.6	4.9	5.2			
2. Change in Output Per Worker Hour(AR)	-1.0	-1.2	-1.1	2.3	0.2	0.4	1.0	-0.2	-1.5	-0.7	0.6	0.3	-0.1			
3. Change in Implicit Unit Labor Costs(AR)	5.6	6.5	5.6	3.0	4.4	4.6	3.9	6.3	6.5	5.7	4.0	4.6	5.3			
4. Change in Private Price Deflator(AR)	5.7	4.2	3.4	3.8	4.3	4.0	4.2	4.4	5.1	4.4	3.1	4.0	4.4			
PRICES																
5. Consumer Price Index	117.5	119.1	120.4	121.4	122.8	124.6	126.2	127.8	129.3	131.1	4.1	4.6	5.2	118.3	123.8	130.2
6. Percent Change(AR)	5.2	5.4	4.4	3.4	4.7	6.0	5.2	5.2	4.8	5.7						
7. Producer Price Index (Industrial Commodities)	106.1	106.9	107.5	108.1	109.4	110.6	111.9	113.4	114.9	115.9	3.4	3.5	4.9	106.3	110.0	115.4
8. Percent Change(AR)	5.9	3.2	2.3	2.3	4.9	4.5	4.8	5.5	5.4	3.5						
CORPORATE ECONOMY																
9. After Tax Profits	162.7	158.6	144.8	147.8	154.4	158.4	160.5	158.5	152.2	150.3	7.6	0.9	-1.3	153.9	155.3	153.3
10. Inventory Profits	-27.4	-27.4	-20.7	-13.8	-18.3	-19.8	-25.8	-25.6	-19.5	-21.0				-23.7	-19.4	-23.4
11. Genuine Profits	183.3	176.5	166.7	173.8	173.8	174.1	167.8	165.1	164.3	160.4	-0.1	-2.3	-6.6	176.5	172.4	161.0
12. Dow Jones Index Mean Closing	2043.3	2078.5	2217.3	2226.3	1986.5	1995.2	1902.6	1863.9	1983.4	2087.1	-8.5	-2.6	-2.3	2082.5	2027.7	1981.2
13. New York Composite Index Mean Closing	148.72	150.95	159.82	161.75	149.62	150.67	146.88	143.86	150.62	153.51	-6.5	0.7	-1.9	151.2	152.2	149.4
FINANCIAL																
14. Monetary Base	276.3	281.2	285.3	290.2	295.0	299.5	304.3	308.8	313.4	318.2	7.0	6.6	6.3	278.8	297.3	315.9
15. Checkable Deposits	568.4	575.1	582.2	591.4	600.0	610.4	618.1	625.6	636.6	650.5	16.0	5.8	6.3	571.7	604.9	642.9
16. M1	772.1	782.5	792.6	805.3	817.7	831.4	842.9	854.1	869.1	887.1	14.0	6.1	6.4	776.9	824.3	877.4
17. Velocity of M1	6.220	6.232	6.223	6.264	6.268	6.256	6.265	6.260	6.211	6.156	-8.5	0.8	-1.0	6.215	6.263	6.198
18. M2	3003.2	3030.9	3079.0	3134.4	3188.7	3249.1	3299.1	3352.2	3395.8	3442.3	5.3	6.7	6.3	3014.5	3217.8	3421.4
19. Velocity of M2	1.599	1.609	1.602	1.609	1.607	1.601	1.601	1.595	1.590	1.586	1.9	0.2	-0.9	1.602	1.605	1.589
20. Federal Funds	7.16	7.98	8.23	8.20	8.29	8.34	8.84	9.03	8.64	8.17	12.8	12.1	2.5	7.51	8.42	8.62
21. Prime Rate	8.78	9.71	10.00	10.07	10.00	10.00	10.72	11.00	10.69	10.29	13.0	10.0	5.4	9.27	10.20	10.75
22. Six Month T-Bills	6.21	7.27	7.38	7.36	7.48	7.45	7.86	7.91	7.32	6.89	11.5	12.1	-2.5	6.72	7.54	7.35
23. Seasoned AAA Corp	9.90	9.96	10.03	10.07	10.20	10.38	10.73	10.83	10.16	9.71	5.2	4.9	-1.6	9.86	10.35	10.18
24. FHA Mortgage Rate	10.37	10.50	10.38	10.32	10.38	10.43	10.98	11.16	10.65	10.23	1.3	1.9	1.7	10.34	10.53	10.70
ADDITONAL INDICATORS																
25. Housing Starts	1474	1454	1441	1447	1437	1445	1391	1272	1254	1274	-10.6	-2.1	-12.1	1461	1430	1257
26. Single Family Starts	1065	1064	1053	1067	1035	1032	986	903	872	884	-7.5	-3.7	-15.0	1070	1030	876
27. Unit Auto Sales	10.47	10.67	10.50	10.73	10.65	10.39	10.21	9.74	9.68	9.92	4.2	-0.8	-6.9	10.58	10.50	9.77
28. Civilian Employment	114.642	115.109	115.895	116.666	117.219	117.723	118.229	118.609	118.229	119.214	2.2	2.2	1.3	114.965	117.459	118.945
29. Unemployment Rate	5.4	5.5	5.2	5.0	5.0	4.9	4.9	5.0	5.2	5.4	-12.0	-9.2	6.1	5.5	5.0	5.3
30. Industrial Production	136.0	138.2	139.1	140.5	141.4	143.2	144.3	143.2	141.4	140.6	5.5	3.9	-0.4	137.0	142.4	141.7

Table 7.

U.S. Foreign Trade Accounts
for 1988-II and 1988-III with Forecasts for 1988-IV through 1990-III

Georgia State University
College of Business Administration
Economic Forecasting Center
November 1988

	Period (Quarter Year)										Percentage Change			Annual Rate		
	II 88	III 88	IV 88	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	88/87	89/88	90/89	1988	1989	1990
MERCHANDISE TRADE (Not Seasonally Adjusted - Annual Rates)																
1. Merchandise Exports	324695	309480	330930	340101	361290	353330	378004	381710	395290	388830	25.0	13.3	10.4	316137	358181	395539
2. Food & Live Animals	24730	28078	27110	27460	27320	28120	28226	27740	27620	28360	34.2	8.0	1.0	25731	27782	28047
3. Beverages & Tobacco	4527	4233	4935	4866	4925	4715	5088	4820	4890	4710	23.6	8.1	-0.5	4532	4899	4876
4. Crude Materials	25143	22963	24460	24630	25085	24215	25750	25160	24750	23510	20.4	1.4	-1.3	24587	24920	24605
5. Mineral Fuels	8641	8322	8775	7315	7620	8730	9110	8020	8460	9580	6.2	0.1	10.0	8188	8194	9014
6. Animal & Vegetable Oil	1520	1246	1140	1120	1160	1150	1180	1140	1090	1110	37.6	-14.6	-2.8	1350	1153	1120
7. Chemicals	32428	32533	33240	34780	37110	37220	37410	38960	41050	40760	22.1	13.7	10.4	32215	36630	40435
8. Manufactured Goods	22797	22370	23830	24470	26830	26540	28050	28610	29830	29240	30.6	18.3	12.0	22382	26473	29646
9. Machinery, Trnspt. Eq.	137296	127494	141610	148650	156930	150500	165650	169420	174630	169450	23.3	16.1	12.6	133893	155433	175002
10. Misc. Manufacturing	24446	24759	25930	27110	29460	29560	31050	31640	33560	33730	26.2	19.6	14.7	24487	29295	33590
11. Commodities, n.e.c.	30088	25918	28210	27750	30640	29420	32240	31780	34250	33920	32.5	11.1	14.2	27005	30013	34280
12. Foreign Merchandise	13078	11564	11690	11950	14210	13160	14250	14420	15160	14460	30.7	13.8	11.4	11768	13393	14924
13. Merchandise Imports	438806	439744	446683	436402	448376	454874	465214	459659	468008	461822	7.8	3.1	3.2	437456	451217	465548
14. Food & Live Animals	19171	19628	20320	20710	20950	22320	23920	24260	23740	23660	-1.1	8.1	10.4	20327	21975	24254
15. Beverages & Tobacco	3930	4052	4690	3715	3995	4130	4780	3700	3885	4070	-0.6	1.9	-1.5	4080	4155	4091
16. Crude Materials	13656	13541	14210	14050	15136	14380	14730	14960	14135	13860	17.8	7.3	-2.0	13578	14574	14288
17. Mineral Fuels	42543	41681	39383	37797	32695	40374	43334	45239	44088	46382	-6.2	-7.0	20.3	41463	38550	46373
18. Animal & Vegetable Oil	656	979	960	950	960	930	940	900	870	860	44.6	15.0	-7.4	822	945	875
19. Chemicals	20052	19723	20560	22100	22000	21750	22880	24230	23620	23160	24.1	10.2	7.5	20122	22183	23843
20. Manufactured Goods	61987	62902	64000	65100	66000	67150	67880	69210	68460	66930	16.5	7.1	2.3	62134	66533	68064
21. Machinery, Trnspt. Eq.	198104	185588	191640	185360	197200	184960	190730	183670	195430	184690	7.1	-0.5	-0.5	190518	189563	188560
22. Misc. Manufacturing	66566	78563	76930	75160	77420	85930	82160	81840	81960	85820	10.0	11.8	3.4	71714	80168	82919
23. Commodities, n.e.c.	12140	13087	13990	11460	12020	12950	13860	11650	11820	12390	2.6	-1.0	-2.3	12698	12573	12280
FOREIGN TRANSACTIONS - GNP ACCOUNTS (Seasonally Adjusted - Annual Rates)																
24. Total Exports	507.1	526.3	531.1	550.6	570.8	585.5	597.1	609.2	619.1	631.8	19.9	12.3	8.7	513.1	576.0	626.1
25. Mdse Exports	316.9	328.0	328.9	341.6	356.3	368.0	376.0	383.7	390.3	398.8	25.1	13.1	9.6	318.7	360.5	395.1
26. Factor Income	104.2	112.4	115.6	119.8	123.2	124.6	127.8	130.3	131.8	134.2	13.7	13.4	7.8	109.2	123.9	133.5
27. Other Services	86.1	85.9	86.6	89.2	91.3	92.6	93.3	95.2	97.0	98.8	10.4	7.5	6.6	85.2	91.6	97.6
28. Total Imports	597.5	611.2	619.9	629.2	639.3	647.2	656.1	670.3	672.0	672.3	10.2	5.9	4.8	607.1	643.0	674.0
29. Mdse Imports	439.4	444.6	448.7	451.4	457.4	459.9	465.2	474.7	473.0	469.8	7.4	3.4	3.2	443.6	458.5	473.2
30. Factor Income	82.9	89.3	93.2	97.4	100.6	104.3	107.6	110.4	112.6	114.5	30.5	17.9	11.2	86.9	102.5	113.9
31. Other Services	75.3	77.3	78.0	80.4	81.3	83.0	83.3	85.2	86.4	88.0	7.2	7.0	6.1	76.6	82.0	87.0
32. Net Transfer Payments	11.8	12.6	15.9	12.6	11.1	10.9	14.5	11.6	10.9	11.2	-2.0	-7.4	-1.0	13.3	12.3	12.1
33. Government Interest	26.8	28.8	30.5	31.8	33.6	35.8	38.4	41.5	43.7	45.3	17.2	23.9	28.3	28.2	34.9	44.8
34. Net Foreign Investment	-129.1	-126.3	-135.2	-123.0	-113.2	-108.4	-111.9	-114.2	-107.5	-97.0				-135.5	-114.1	-104.7
35. Trade Weighted Value of Dollar (3/73 = 100)	90.4	97.6	90.7	88.4	91.2	92.6	89.5	87.3	89.1	92.3	-4.9	-1.9	-1.0	92.2	90.4	89.50

Table 8.

Personal Consumption Expenditure Implicit Price Deflators
for 1988-II and 1988-III with Forecasts for 1988-IV through 1990-III

Georgia State University
College of Business Administration
Economic Forecasting Center
November 1988

	Period (Quarter Year)										Percentage Change			Annual Rate		
	II 88	III 88	IV 88	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	88/87	89/88	90/89	1988	1989	1990
1. Durable Goods	109.5	110.4	110.8	111.5	112.1	112.9	113.5	114.2	115.2	115.9	1.9	2.3	2.6	110.0	112.5	115.5
2. Percent Change(AR)	1.5	3.0	1.7	2.4	2.3	2.7	2.1	2.7	3.3	2.7						
3. Automobiles	116.6	117.5	118.3	118.9	119.9	133.9	134.8	122.1	122.9	123.7	2.1	8.2	-2.8	117.2	126.9	123.3
4. Percent Change(AR)	0.2	3.3	2.6	2.0	3.4	55.7	2.6	-32.7	2.8	2.5						
5. Furniture	98.6	99.1	99.0	99.4	99.4	99.7	99.5	100.1	100.6	100.7	0.5	0.8	1.0	98.7	99.5	100.5
6. Percent Change(AR)	0.9	2.0	-0.3	1.5	0.0	1.2	-0.7	2.5	2.0	0.2						
7. Other Durables	116.8	117.7	118.8	120.1	121.5	123.0	124.8	126.7	128.6	130.6	4.7	4.5	5.9	117.1	122.3	129.6
8. Percent Change(AR)	5.5	3.3	3.9	4.5	4.6	5.1	5.8	6.3	6.3	6.4						
9. Nondurables	116.0	117.3	118.5	119.5	121.3	122.6	124.2	125.9	127.6	128.8	3.9	4.7	5.2	116.4	121.9	128.2
10. Percent Change(AR)	7.8	4.5	4.3	3.3	6.0	4.6	5.3	5.5	5.6	3.8						
11. Food	120.5	123.2	124.9	125.9	128.1	130.2	131.8	133.4	134.8	136.3	4.2	5.9	5.1	121.8	129.0	135.6
12. Percent Change(AR)	6.3	9.0	5.8	3.2	7.1	6.8	4.9	5.0	4.3	4.5						
13. Apparel	117.2	114.8	116.5	117.5	120.8	119.2	121.0	122.0	124.2	123.1	3.9	3.7	3.3	115.4	119.6	123.6
14. Percent Change(AR)	15.4	-8.1	6.2	3.4	11.8	-5.3	6.2	3.4	7.5	-3.5						
15. Gasoline and Oil	79.0	80.8	79.7	79.5	77.9	79.8	80.7	83.4	85.5	87.8	1.0	0.4	8.7	79.2	79.5	86.4
16. Percent Change(AR)	9.3	9.8	-5.6	-1.1	-7.8	10.4	4.5	13.8	10.7	11.3						
17. Fuel Oil	78.9	77.8	75.9	75.1	73.5	74.4	76.1	78.0	79.5	80.4	1.2	-3.5	7.0	77.5	74.8	80.0
18. Percent Change(AR)	8.7	-5.3	-9.6	-4.0	-8.6	5.4	9.6	10.0	8.3	4.2						
19. Other Non Durables	129.9	131.0	132.3	134.0	135.6	137.1	138.7	140.4	142.3	144.2	4.4	4.6	5.0	130.4	136.3	143.2
20. Percent Change(AR)	5.1	3.4	4.0	5.3	4.9	4.4	4.7	5.1	5.6	5.4						
21. Services	134.0	135.5	137.2	139.0	140.8	142.6	144.4	146.4	148.4	150.6	4.9	5.2	5.5	134.8	141.7	149.5
22. Percent Change(AR)	5.4	4.7	5.1	5.2	5.5	5.2	5.0	5.8	5.6	5.9						
23. Housing	135.8	137.6	139.6	141.5	143.1	145.0	147.1	149.1	150.9	153.1	4.9	5.3	5.5	136.9	144.2	152.1
24. Percent Change(AR)	3.0	5.4	6.1	5.4	4.6	5.5	5.9	5.6	4.9	5.9						
25. Electricity and Gas	112.8	112.9	113.2	113.4	114.1	115.1	115.5	115.8	116.5	117.4	0.4	1.6	2.1	112.7	114.5	116.9
26. Percent Change(AR)	2.6	0.3	1.0	0.9	2.4	3.5	1.3	1.3	2.3	3.4						
27. Household Operations	127.7	128.1	128.2	128.0	129.1	130.2	131.2	132.2	133.3	134.3	1.9	1.7	3.2	127.5	129.7	133.8
28. Percent Change(AR)	6.0	1.0	0.6	-0.6	3.4	3.6	3.1	2.9	3.3	3.3						
29. Transportation	125.3	125.3	129.1	130.5	133.8	134.4	136.2	137.8	141.0	142.3	5.5	6.8	5.7	125.3	133.7	141.4
30. Percent Change(AR)	13.6	-0.1	12.8	4.5	10.6	1.6	5.6	4.8	9.5	3.9						
31. Medical Care	141.9	144.6	146.5	149.2	151.5	154.1	155.8	158.8	161.4	164.3	6.5	6.7	6.6	143.0	152.6	162.7
32. Percent Change(AR)	8.6	7.9	5.2	7.6	6.3	7.1	4.4	8.0	6.7	7.4						
33. Other Services	134.4	135.9	137.1	138.8	140.6	142.3	144.2	146.2	148.1	150.2	5.0	4.7	5.4	135.1	141.5	149.2
34. Percent Change(AR)	3.8	4.4	3.7	5.1	5.3	4.9	5.5	5.6	5.3	5.8						

Table 9.

Gross National Product Implicit Price Deflators
for 1988-II and 1988-III with Forecasts for 1988-IV through 1990-III

Georgia State University
College of Business Administration
Economic Forecasting Center
November 1988

	Period (Quarter Year)										Percentage Change			Annual Rate		
	II 88	III 88	IV 88	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	88/87	89/88	90/89	1988	1989	1990
1. Gross National Product	121.0	122.3	123.3	124.6	125.9	127.1	128.4	129.9	131.5	132.9	3.3	4.1	4.5	121.5	126.5	132.1
2. Percent Change(AR)	5.5	4.4	3.3	4.3	4.2	3.9	4.2	4.8	5.0	4.3						
3. Personal Consumption	123.9	125.6	126.6	127.9	129.6	131.1	132.6	134.4	136.2	137.8	4.3	4.6	5.1	124.6	130.3	136.9
4. Percent Change(AR)	5.7	5.6	3.2	4.2	5.4	4.7	4.7	5.5	5.5	4.8						
5. Consumer Price Index	117.5	119.1	120.4	121.4	122.8	124.6	126.2	127.8	129.3	131.1	4.1	4.6	5.2	118.3	123.8	130.2
6. Percent Change(AR)	4.9	5.6	4.4	3.4	4.7	6.0	5.2	5.2	4.8	5.7						
7. Private Domestic Invest	106.0	106.2	105.7	106.5	106.8	106.9	107.5	108.2	108.2	108.4	-0.0	1.2	1.4	105.7	106.9	108.4
8. Percent Change(AR)	5.0	0.7	-2.1	3.2	1.1	0.5	2.3	2.5	0.0	0.9						
9. Structures	113.8	114.3	114.7	115.3	115.8	116.4	117.1	117.7	118.3	119.1	2.6	1.9	2.2	114.0	116.2	118.7
10. Percent Change(AR)	2.9	1.8	1.4	2.1	1.7	2.1	2.4	2.1	2.1	2.7						
11. Producers' Durables	94.6	94.7	94.9	95.4	95.8	96.3	96.9	97.4	97.8	98.1	-1.5	1.4	2.0	94.8	96.1	98.0
12. Percent Change(AR)	-0.8	0.4	0.8	2.1	1.7	2.1	2.5	2.1	1.7	1.2						
13. Residential Structures	119.5	119.6	120.0	120.5	120.9	121.6	122.3	123.3	124.3	125.3	2.9	1.4	2.8	119.7	121.3	124.7
14. Percent Change(AR)	0.0	0.3	1.3	1.7	1.3	2.3	2.3	3.3	3.3	3.3						
15. Exports	102.1	103.8	105.0	105.9	106.8	107.9	109.0	109.9	110.9	112.0	2.7	4.5	3.8	102.8	107.4	111.5
16. Percent Change(AR)	7.4	6.8	4.7	3.5	3.4	4.2	4.1	3.3	3.7	4.0						
17. Imports	101.4	101.6	102.1	102.8	103.6	104.6	106.0	107.5	108.6	109.8	2.6	2.7	4.8	101.5	104.3	109.3
18. Percent Change(AR)	2.4	0.8	2.0	2.8	3.1	3.9	5.5	5.8	4.2	4.5						
19. Federal	115.3	114.5	114.5	117.0	118.0	118.6	119.5	121.8	123.1	124.0	1.9	3.0	4.4	114.9	118.3	123.5
20. Percent Change(AR)	0.3	-2.7	0.0	9.0	3.5	2.0	3.1	7.9	4.3	3.0						
21. Federal Purchases	108.2	106.7	106.3	108.2	109.2	110.2	111.4	112.5	113.7	114.9	0.2	2.2	4.2	107.4	109.8	114.3
22. Percent Change(AR)	-0.7	-5.4	-1.5	7.3	3.7	3.7	4.4	4.0	4.3	4.3						
23. Federal Value Added	127.2	127.3	127.9	132.3	133.3	133.5	134.2	138.6	139.6	139.9	4.0	4.8	4.8	127.2	133.3	139.7
24. Percent Change(AR)	2.2	0.3	1.9	14.5	3.1	0.6	2.1	13.8	2.9	0.9						
25. State & Local	128.1	129.4	130.6	132.2	133.4	135.0	136.6	138.2	139.7	141.4	4.6	4.4	4.7	128.7	134.3	140.6
26. Percent Change(AR)	5.2	4.1	3.8	5.0	3.7	4.9	4.8	4.8	4.4	5.0						
27. State/Local Purchases	117.2	118.2	119.2	120.7	121.5	123.1	124.6	126.0	127.3	128.8	3.7	4.2	4.6	117.6	122.5	128.1
28. Percent Change(AR)	5.3	3.5	3.4	5.1	2.7	5.4	5.0	4.6	4.2	4.8						
29. State/Local Value Added	136.9	138.6	139.9	141.6	143.1	144.8	146.4	148.2	149.9	151.7	5.4	4.6	4.7	137.6	144.0	150.8
30. Percent Change(AR)	5.4	5.1	3.8	4.9	4.3	4.8	4.5	5.0	4.7	4.9						

Table 10.

Details of Private Consumption in the U.S.
for 1988-II and 1988-III with Forecasts for 1988-IV through 1990-III

Georgia State University
College of Business Administration
Economic Forecasting Center
November 1988

	Period (Quarter Year)										Percentage Change			Annual Rate		
	II 88	III 88	IV 88	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	88/87	89/88	90/89	1988	1989	1990
CURRENT DOLLARS																
1. Durable Goods	449.8	453.6	455.1	463.7	467.7	470.4	471.6	471.4	474.9	481.9	6.5	4.3	2.0	449.1	468.4	477.8
2. Autos, Trucks & Parts	208.7	211.0	212.1	217.1	218.7	219.4	220.0	217.8	220.4	226.2	6.5	4.9	1.8	208.5	218.8	222.8
3. Furniture	159.5	159.5	159.1	161.3	162.5	163.3	162.4	162.9	162.8	162.7	6.7	2.6	0.1	158.2	162.4	162.6
4. Other	81.5	83.1	83.9	85.3	86.5	87.7	89.2	90.7	91.7	93.0	5.9	5.8	6.1	82.4	87.2	92.5
5. Nondurable Goods	1036.6	1057.6	1067.9	1077.9	1097.7	1113.1	1129.1	1147.4	1164.7	1181.0	4.7	5.7	6.2	1044.6	1104.5	1172.8
6. Food	546.3	557.2	564.1	570.6	581.8	592.2	601.1	610.3	617.9	626.4	4.6	6.5	6.2	550.9	586.4	622.6
7. Clothing & Shoes	183.2	187.3	188.5	188.8	195.0	194.4	196.6	199.1	201.6	202.4	3.7	4.8	4.3	184.9	193.7	201.9
8. Gasoline & Oil	78.8	79.7	79.2	79.3	78.1	79.5	80.3	82.6	84.9	87.3	1.9	1.0	8.1	78.5	79.3	85.7
9. Fuel Oil & Coal	17.2	17.9	17.3	16.9	16.6	16.3	16.6	17.0	17.5	17.6	7.4	-4.3	5.5	17.4	16.6	17.5
10. Other	211.0	215.5	218.8	222.3	226.2	230.7	234.5	238.4	242.8	247.3	6.4	7.3	7.2	213.0	228.4	245.0
11. Services	1708.2	1746.4	1778.3	1814.9	1849.9	1885.3	1920.0	1959.4	1997.2	2036.9	8.4	8.2	8.0	1726.8	1867.5	2017.0
12. Housing	496.4	506.3	516.4	525.8	534.2	543.8	554.1	564.2	573.6	584.5	7.4	7.4	7.4	502.3	539.5	579.5
Household Operations																
13. Utilities	90.9	94.7	92.9	93.8	94.7	96.1	97.1	98.1	99.0	100.3	3.8	3.5	4.5	92.2	95.4	99.7
14. Other	102.7	104.5	105.8	106.4	107.8	109.4	110.9	112.1	113.4	114.6	6.0	5.0	5.0	103.4	108.6	114.1
15. Transportation	116.4	118.0	122.5	124.5	128.6	131.0	133.9	136.3	140.0	141.9	10.3	10.6	8.7	117.1	129.5	140.8
16. Medical Care	396.6	409.6	419.7	432.2	443.1	454.0	463.0	476.9	489.2	502.8	11.8	11.3	10.6	402.7	448.1	495.4
17. Other	505.2	513.2	521.0	532.2	541.5	551.0	561.0	571.8	582.0	592.8	7.9	7.3	7.5	509.1	546.4	587.5
CONSTANT DOLLARS																
18. Durable Goods	410.6	411.0	410.6	415.9	417.1	416.7	415.6	412.7	412.4	415.7	4.5	2.0	-0.6	408.3	416.3	413.9
19. Autos, Trucks & Parts	179.0	179.5	179.3	182.6	182.4	181.6	180.9	178.4	179.3	182.9	4.4	2.3	-0.6	177.8	181.9	180.7
20. Furniture	161.8	161.0	160.7	162.3	163.5	163.8	163.2	162.7	161.8	161.6	6.1	1.9	-0.9	160.2	163.2	161.8
21. Other	69.8	70.6	70.6	71.0	71.2	71.3	71.5	71.6	71.3	71.2	1.1	1.3	0.2	70.3	71.3	71.4
22. Nondurable Goods	893.6	901.7	901.0	902.1	905.3	907.7	909.0	911.4	912.6	916.8	0.8	1.0	1.0	897.3	906.0	914.7
23. Food	453.2	452.4	451.6	453.2	454.2	454.8	456.1	457.5	458.4	459.6	0.4	0.5	1.0	452.2	454.6	459.1
24. Clothing & Shoes	156.3	163.2	161.8	160.7	161.4	163.1	162.5	163.2	162.3	164.4	-0.2	1.1	0.9	160.2	161.9	163.4
25. Gasoline & Oil	99.8	98.6	99.4	99.8	100.3	99.6	99.5	99.1	99.3	99.4	0.9	0.7	-0.5	99.2	99.8	99.3
26. Fuel Oil & Coal	21.8	23.0	22.8	22.5	22.6	21.9	21.8	21.8	22.0	21.9	6.2	-0.9	-1.5	22.4	22.2	21.9
27. Other	162.4	164.5	165.4	165.9	166.8	168.3	169.1	169.8	170.6	171.5	1.9	2.6	2.1	163.3	167.5	171.1
28. Services	1274.8	1288.5	1295.8	1305.9	1313.5	1321.8	1329.8	1338.2	1345.6	1352.9	3.4	2.8	2.4	1281.3	1317.8	1349.4
29. Housing	365.6	368.0	369.8	371.6	373.3	375.0	376.7	378.4	380.1	381.8	2.4	2.0	1.8	366.8	374.2	381.0
Household Operations																
30. Utilities	80.6	83.9	82.1	82.7	83.0	83.5	84.1	84.7	85.0	85.4	3.4	1.9	2.3	81.8	83.3	85.3
31. Other	80.4	81.6	82.5	83.1	83.5	84.0	84.5	84.8	85.1	85.3	4.0	3.3	1.8	81.1	83.8	85.3
32. Transportation	92.9	94.2	94.9	95.4	96.1	97.5	98.3	98.9	99.3	99.7	4.6	3.6	2.9	93.4	96.8	99.6
33. Medical Care	279.5	283.2	286.5	289.7	292.5	294.6	297.2	300.3	303.1	306.0	5.0	4.3	3.8	281.5	293.5	304.5
34. Other	375.8	377.7	380.0	383.4	385.1	387.2	389.0	391.1	393.0	394.7	2.7	2.5	2.0	376.7	386.2	393.8

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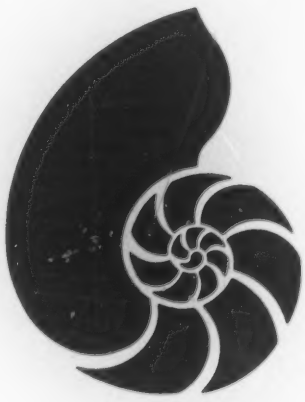
1989 IV–1990 III

GEORGIA STATE UNIVERSITY
COLLEGE OF BUSINESS ADMINISTRATION

February 1989

Dr. Donald Ratajczak, Director



ECONOMIC FORECASTING CENTER

BUMPY LANDING IN STORE FOR ECONOMY

Dr. Donald Ratajczak
Director
Economic Forecasting Center
Georgia State University

Summary

Several months ago, the consensus forecast was that inflation and interest rates would rise early in 1989. Then, the Federal Reserve would gain control of inflation, leading to only moderate softening in economic growth and a modest decrease in inflation rates and interest rates. As a result, the economy was expected to achieve a moderately soft landing to a sustained rate of economic expansion without serious inflationary pressures.

However, the inflationary surge has not yet arrived. Consumer prices grew at a slower rate in the fourth quarter than at mid-year as the drought effects on food began to diminish. Although OPEC increased oil prices, seasonal reductions in demand for gasoline have prevented those price increases from being passed along to motorists. Moreover, the OPEC price increases are becoming increasingly shaky as the winter season slowly draws toward a close. Collapsing oil prices in the spring could prevent any fallout from the OPEC price initiatives. As a result of this inflationary moderation, a new concensus has been developing. That view suggests that the back of inflation already has been broken by the Federal Reserve. As a result, inflation and interest rates can both recede in 1989. If so, any further construction correction will be modest while capital spending can continue to grow strongly in order to rebuild American capacity.

Unfortunately, the new consensus is overlooking the slowly evolving inflationary pressures in the labor markets. It also is ignoring the impact that a temporary strengthening of the dollar has had on import prices. Although the dollar is continuing to rally, improvement in our trade balances is beginning to slow. Soon, foreign investors will realize that interest rates are not rising and that trade deficits are not declining. When the dollar changes direction, higher inflationary pressures from imported goods may be anticipated. Finally, wage costs are continuing to rise. The employment cost index rose more than 5% from previous year levels in the fourth quarter or 1988. Increases in excess of 6% are likely early in 1989. Our own projections show that private domestic wage compensation will grow by 5.5% in 1989 and by nearly 6% in 1990. With continuing minor gains in productivity, this means that unit labor costs in the private economy will be growing in excess of 5% both years. While competitive pressures may initially prevent these higher cost pressures from spilling into inflation, accelerating price pressures appear to be in store by the second half

of this year. In short, the consensus was merely early in its previous assumptions of rising interest rates and inflation.

Unfortunately, the economy cannot tolerate significantly higher interest rates without significantly slowing economic activity. As the prime rate rises to 12% by the end of this year and mortgage rates also approach those levels early in 1990, housing and auto sales should begin slipping. Housing starts are expected to slow to 1.44 million in 1989 and fall further to 1.38 million in 1990. Auto sales, which rebounded to 10.66 million in 1988 should slow moderately both in 1989 and 1990.

Moreover, the previous strengthening of the dollar will prevent substantial export growth from stimulating the economy through most of 1989. In addition, increased oil demand will add to import flows into this country, along with strong importation of transportation and capital goods. The result will be very little improvement in the net foreign investment position of the United States. After improving dramatically from a $161 billion deficit in 1987 to a deficit of $135 billion in 1988, that trade measure will only advance to a deficit of $128 billion in 1989 and remain at that level in 1990. This should lead to further weakening of the dollar. Indeed, the trade-weighted value of the dollar is expected to fall from its current level of more than 96 to less than 84 by the end of 1990. This would be consistent with approximately 110 yen and 1.65 German marks at that time.

Despite reduced gains in the trade account and some slowing in the housing and consumer durable areas, spending on consumer goods in general and on capital goods are expected to remain strong through the forecast period. As a result, the slowing in economic activity will lead to some economic bumps, possibly a mild recession beginning in the second half of 1990. However, no dramatic economic collapse is anticipated. For example, our projections of annual growth are for a gain of 3% in 1989 followed by a sub-par but not disastrous 1.3% gain in 1990. As measured by the GNP deflator, inflation is expected to accelerate from 3.4% in 1988 to 4.2% in 1989 and 4.7% in 1990. Consumer prices also are expected to strengthen from 4.1% in 1988 to 4.7% in 1989 and 5.3% in 1990.

Budgetary restraint will not be sufficient to substantially lower budgetary deficits in such an economic environment. Initially, rising interest rates will prevent deficits from declining. Also, interest payments on the bonds floated to buy the assets of insolvent savings and loans banks are assumed to be an addition to deficits of government enterprises. (The bonds themselves, though substantially adding to the supply of long-term borrowing instruments in 1989 and 1990, will not directly be included in the government deficit.) When the economy slows significantly, however, reduced returns from corporate and personal taxes will add to the revenue problems. As a result, federal deficits are expected to remain near $140 billion over the next two years.

Following the uptick in interest rates in 1989, slowing economic activity will redirect interest rates downward in 1990. By the end of that year, the prime rate should be back down to 10.5% while long-term government bonds should again be yielding less than 9%. Unfortunately, the outlook for a weaker dollar and higher interest rates is not favorable for stock market values. Following a peak in the spring that could bring the markets to more than 2400 on the Dow Jones, a stock market decline then is projected into 1990. Only after the crash lows of 1987 have been tested at that time, will the equity markets be poised for another significant advance.

Prospects for a smoother economic landing would be enhanced if substantial reductions in budget deficits were pursued early in 1989 while economic activity remains robust. Then, slowing from such budgetary restraint could be countered by a reduction in monetary restraint. This could lead to declining interest rates at a time when demand pressures are easing. While the dollar still could weaken under such conditions, inflationary prospects would not be substantial. Unfortunately, such a confluence of economic policies is not likely at the present time.

Outlook

A remarkable absence of economic imbalance exists as the economy moves into 1989. Inventories at the manufacturing and retail level are moderate relative to current and expected sales. While wholesalers may have accumulated slightly excessive inventories, any imbalances there are not large. As a result, the economy may observe increased economic activity to restore moderately depleted inventories.

While construction remains overbuilt, both commercial and housing activity have been adjusting for this excess for some time. Balance is not expected to be restored in the apartment or commercial vacancy conditions for some time, but the level of construction activity may not need to be lowered significantly.

Capital spending remains robust, but rising utilization rates suggest that increasing capacity currently is desirable. Until economic activity slows, the current rate of growth in capital spending is justified.

Consumer savings have been drifting upward as increasing wage growth has not yet been exhausted by increasing inflation. Clearly, the upside potential in sales of consumer durables is not significant at this time but no consumer correction appears to be imminent. The asset-outlay ratio remains above 4 and appears to have increased slightly in the fourth quarter. Significant corrections in consumer spending usually do not develop when assets exceed outlays by such a large margin.

Perhaps the only serious area of concern is slowing in the rapid growth of export activity. Both because of absorption restraints and a rebound in the dollar's value, export growth has slowed significantly in the second half of this year. The dollar's continuing strength will continue to restrain the growth of exports. In addition, with strong consumer and capital spending needs being generated domestically, imports will continue to flood in. The result is stability in the trade deficits which eventually will be discouraging to foreign investors. Thus, the dollar's temporary strength will need to be reversed in order to restore the surge in export activity that was ignited a year ago by the dollar's previous weakness. Until the dollar reverses direction later in the spring, however, economic conditions are especially favorable for an increase in equity values. As long as foreign investors believe the dollar will strengthen, they are encouraged to purchase American assets. Moreover, a strong dollar reinforces a growing belief that inflation is not as large a risk as originally thought. This has led to a significant rally in long-term government bonds. Finally, with economic conditions continuing to suggest expansion ahead, expected corporate profitability is improving. Improved profitability, falling interest rates, and a strong dollar are three prescriptions toward improving equity values.

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Unfortunately, all these good conditions will not persist indefinitely. Wage costs continue to rise on a year-over-year basis. The employment cost index was up more than 5% in the fourth quarter of 1988. Wage compensation for hours worked in the private economy expanded 5.6% at annual rates in the fourth quarter, only slightly less than the 5.7% third quarter gain. Although moderate inflationary pressures may temporarily restrain wage demands, tight labor markets suggest that wage pressures will continue to intensify. If so, inflation has merely been delayed rather than cancelled by Federal Reserve restraint.

Moreover, the 1988 drought will have a 1989 meat price surge. Just as the drought during last summer initially excited inflationary anticipations, the surge in meat prices in 1989 should lead to inflationary fears. The Federal Reserve will have to react to these rising inflationary perceptions, which will have some foundations in rising wage costs. The result will be rising interest rates during the second half of the year. However, the increase in interest rates is not expected to ease commodity inflation until early in 1990. As a result, some speculative inventory holdings could develop. This would then require significant reductions in inventory investments to restore appropriate balance in that area.

Also, capital spending will not need to grow as vigorously once the economy slows. While expanding capital spending is expected both in 1989 and 1990, spending gains for producers' durables should slow to less than 5% in 1989 and 1990 from an increase of more than 13% in 1988.

The big question mark is whether the consumer will resist increasing price and interest rate pressures. Our own analysis suggests that the consumer is most heavily motivated by employment prospects. Therefore, until the unemployment rate increases some time in 1990, the consumer will not be dissuaded from maintaining strong spending programs. This will tend to preserve modest economic expansion into 1990. However, when unemployment begins rising, consumer restraint should increase significantly. Indeed, the correction in spending on consumer durables could be more severe than currently outlined in our analysis.

Assumptions

Monetary and budgetary policy are especially important to determining the economic outlook that is being generated. For example, a change in the policy mix toward greater fiscal restraint early in 1989, when economic activity remains strong, can be countered later in 1989 by increased monetary ease. Such a shift in policy could restrain capacity conditions and therefore hold down inflationary pressures while reduced interest rates could have some positive effects upon production costs. Also, economic activity would be stimulated in the interest-sensitive sectors as interest rates decline. Thus, the economy could rotate away from some spending-based activity to capital-accumulating activity without seriously slowing the overall economy and without substantially creating higher inflationary pressures.

On the other hand, if monetary growth is what generates inflationary anticipations, an idea that is expressed in many academic journal articles, then the current monetary restraint should be able to dramatically alter inflationary pressures. As a result, continuation of restraint would lead to further decli-

nes both in interest rates and inflation. Obviously, our outlook does not assume that monetary growth is the method by which inflationary expectations are being formulated. Rather, other inflationary pressures, such as labor market tightness, delivery delays, and import prices are more crucial to the inflationary process. Thus, according to our procedures, monetary policy does not have a unique capability of operating upon the inflationary attitudes.

Most of our budgetary assumptions are reflected in table 5. Significant defense restraint is anticipated. Actual expenditures are expected to grow slightly slower than underlying inflation. Some changes in farm support policies are anticipated in Commodity Credit Corporation purchases and the Commodity Credit Corporation portion of the deficit of government enterprises. However, the sharp reversal in the deficit of government enterprises is caused by assuming that the interest service of the bonds floated by the Federal Savings and Loans Insurance Corporation will be a charge to the operating performance of that agency. Clearly, depositors will not finance the servicing charges necessary to absorb the assets of insolvent institutions according to these assumptions. The portfolio adjustments associated with such an increase in deposit fees would be severe. The budgetary assumptions also preclude any significant tax initiative, such as a capital gains tax or even significant tax credits, to encourage social program enhancements.

The monetary assumptions are largely contained in table 6. Rapid money growth in the monetary base early in 1989 indicates that the Federal Reserve no longer is engaged in significant restraining activity. Reduced inflationary fears probably have permitted a slight shift in policy. In addition, higher interest rates have prevented any significant growth in checkable deposits. As interest rates stabilize, however, checkable deposits are expected to grow more rapidly in the spring. Then, rising inflationary fears will lead to moderate Federal Reserve restraint later in the year. Early in 1990, when the economy begins slowing significantly, the Federal Reserve is expected to ease moderately. Of course, such an easing will not prevent the economic slowdown but will diminish the magnitude of its decline.

Other forecasting assumptions are as follows:

a. After increasing 8.3% in 1988, barrels of imported oil are expected to grow 4.5% in 1989 and an additional 3.4% in 1990. Oil prices are assumed to rise slightly in 1989 to an average of $15.27. A further increase to $18.01 in 1990 is assumed. No change in excise taxes was assumed for energy components.

b. Cost-of-living adjustments for government programs are not expected to be modified. Reductions in cost-of-living for government retirees were not expected to be enacted. An adjustment of 4.1% in January 1989 is expected to be followed by a cost-of-living adjustment of 4.7% in January 1990.

c. The wage base for Social Security was assumed to be $48,000 in 1989 and $51,500 in 1990. An already enacted law increases the Social Security rate to 7.71% for employer and employee in 1990. Further taxes on Social Security payrolls or benefits were not assumed.

d. World trade is expected to grow 4% in 1989 and 3.5% in 1990.

e. Minimum wage legislation was expected to be enacted increasing the minimum to $4.55 over three years with effectiveness in 1990. Legislated benefits for health and childcare also were assumed to be effective in 1990 at a cost of 0.3% of labor costs per year.

f. Despite important labor negotiations in the metals industries this year, no significant work stoppages were assumed during the forecast period.

CONCLUSION

At the present time, the economy shows no bottlenecks that usually precede an economic downturn. However, tightening labor markets continued to push wage pressures upward. The dollar's strength has significantly improved the competitiveness of foreign producers. This has resulted in failure to pass on increased costs in higher prices. Eventually, however, the wage pressures are expected to be reflected in increasing inflation. At that time, the Federal Reserve is expected to respond by restraining monetary growth and permitting increased short-term interest rates. These increased interest burdens are expected eventually to generate a mild recession in the latter half of 1990.

Despite the outlook for a bumpy economic road ahead, near-term economic conditions still should be acceptably favorable. Real economic output should rise 3.0% in 1989 before slowing to a 1.3% gain in 1990. Moderate monetary restraint and a mild recession should lead to moderating wage inflation. The economy then will be poised for renewed economic expansion early in the next decade. However, a recession and further weakness in the dollar appear to be necessary in order to further advance the U.S. movement toward acceptable trade deficits. The current dollar value has not been sufficient to substantially reduce the trade burden. Therefore, economic conditions may be bumpy during the next two years but they will also be working toward resolving some of the economic problems that have surfaced but have not yet been effectively addressed. In that regard, the economic outlook is not as gloomy as it otherwise would appear.

Table 1.

U. S. Expenditures in Current Dollars
for 1988-III and 1988-IV with Forecasts for 1989-I through 1991-IV

Georgia State University
College of Business Administration
Economic Forecasting Center
February 1989

	Period (Quarter Year)										Percentage Change			Annual Rate		
	III 88	IV 88	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	87/88	88/89	89/90	1988	1989	1990
1. Personal Consumption	3261.2	3320.1	3371.0	3431.2	3490.9	3550.5	3613.3	3680.5	3739.6	3802.1	7.1	7.3	7.2	3226.0	3460.9	3708.9
2. % Change(AR)	8.6	7.4	6.3	7.3	7.1	7.0	7.3	7.6	6.6	6.9						
3. Durable Goods	452.9	459.3	463.5	471.4	476.8	482.7	488.7	496.4	497.6	497.5	6.7	5.3	4.5	450.0	473.6	495.1
4. Autos, Trucks & Parts	210.2	210.9	211.1	215.9	218.3	221.2	225.6	230.3	230.3	228.4	6.2	4.1	5.6	208.0	216.6	228.7
5. Other Durable Goods	242.7	248.4	252.4	255.5	258.5	261.5	263.1	266.1	267.3	269.1	7.0	6.2	3.7	242.0	257.0	266.4
6. Nondurable Goods	1060.8	1075.2	1085.6	1101.3	1118.6	1134.0	1151.9	1170.4	1188.0	1207.4	4.9	6.0	6.3	1047.2	1109.9	1179.4
7. Services	1747.5	1785.6	1821.9	1858.5	1895.5	1933.8	1972.7	2013.7	2054.4	2097.2	8.6	8.6	8.4	1728.9	1877.4	2034.5
8. Pers Cons less Services	1513.7	1534.5	1549.1	1572.7	1595.4	1616.7	1640.6	1666.8	1685.2	1704.9	5.4	5.8	5.7	1497.1	1583.5	1674.4
9. % Change(AR)	7.6	5.6	3.9	6.2	5.9	5.4	6.0	6.5	4.5	4.8						
10. Pvt Domestic Invstment	772.5	767.9	798.6	813.0	810.7	824.7	820.7	839.1	808.9	802.5	7.4	6.0	0.7	765.5	811.8	817.8
11. Residential Structures	229.1	236.4	237.0	235.0	237.5	237.5	236.1	233.6	240.4	248.2	1.2	3.1	1.2	229.7	236.8	239.6
12. Other Structures	143.8	142.8	141.5	141.9	143.0	143.9	145.7	147.5	148.3	150.0	2.0	0.2	3.7	142.3	142.6	147.9
13. Producer's Durables	349.9	355.1	361.2	372.5	379.7	384.0	394.2	403.3	408.6	410.8	12.4	8.4	8.0	345.5	374.4	404.2
14. Change in Inventories	49.7	33.7	58.9	63.6	50.5	59.3	44.7	54.7	11.6	-6.5	---	---	---	48.1	58.1	26.1
15. Chg in Nonfarm Inv	41.9	42.7	40.5	57.6	47.9	62.7	41.6	52.9	9.0	-2.7	---	---	---	41.8	52.2	25.2
16. Net Exports	-80.0	-90.3	-89.4	-81.9	-80.5	-84.3	-81.3	-83.0	-81.7	-70.8	---	---	---	-93.2	-84.0	-79.2
17. Exports	536.1	543.8	562.0	581.0	601.5	614.2	629.4	646.7	663.0	677.5	21.2	13.7	10.9	518.7	589.7	654.2
18. Imports	616.0	634.1	651.4	662.9	682.0	698.5	710.7	729.7	744.7	748.3	11.0	10.1	8.9	611.9	673.7	733.4
19. Government Purchases	955.3	992.2	1010.2	1024.2	1037.2	1043.4	1064.3	1078.4	1095.6	1103.2	4.2	6.8	5.5	963.6	1028.8	1085.4
20. Federal Purchases	367.7	393.2	401.4	407.2	411.7	408.9	420.6	424.2	431.5	429.3	-0.5	7.1	4.7	380.2	407.3	426.4
21. Defense	294.3	298.4	302.0	304.1	305.0	306.9	312.2	313.9	315.4	316.4	0.7	2.4	3.3	297.5	304.5	314.5
22. Nondefense	73.4	94.9	99.4	103.1	106.7	102.0	108.4	110.3	116.1	112.9	-4.5	24.2	8.9	82.8	102.8	111.9
23. State and Local	587.6	599.0	608.8	617.0	625.5	634.5	643.7	654.2	664.1	673.9	7.5	6.5	6.0	583.4	621.5	659.0
24. Gross National Product	4909.0	4989.9	5090.4	5186.5	5258.3	5334.3	5417.0	5515.0	5562.4	5637.0	7.4	7.3	6.0	4861.8	5217.4	5532.9
25. Net Change(amount)	85.2	80.9	100.5	96.1	71.8	76.0	82.7	98.0	47.4	74.6	---	---	---	335.1	355.6	315.5
26. % Change(curr$, AR)	7.3	6.8	8.3	7.8	5.7	5.9	6.3	7.4	3.5	5.5	---	---	---	7.4	7.3	6.0
27. Gross Natl Product(82$)	4009.4	4029.2	4078.8	4111.8	4126.6	4136.8	4156.4	4179.7	4163.4	4164.3	3.8	3.0	1.3	3995.0	4113.5	4166.0
28. % Change(1982$, AR)	2.5	2.0	5.0	3.3	1.4	1.0	1.9	2.3	-1.6	0.1	---	---	---	3.8	3.0	1.3
29. Implicit Price Deflator	122.4	123.8	124.8	126.1	127.4	128.9	130.3	131.9	133.6	135.4	3.4	4.2	4.7	121.7	126.8	132.8
30. % Change(AR)	4.7	4.7	3.3	4.4	4.1	4.9	4.4	5.2	5.3	5.4	---	---	---	3.4	4.2	4.7
31. Final Sales(curr$)	4859.3	4956.3	5031.5	5122.9	5207.8	5275.0	5372.3	5460.3	5550.8	5643.5	7.3	7.2	6.7	4813.7	5159.3	5506.7
32. Net Change from Prev	79.2	97.0	75.2	91.4	84.9	67.2	97.3	88.0	90.5	92.7	---	---	---	---	---	---
33. Final Sales(1982$)	3969.9	4000.0	4031.0	4060.6	4088.1	4091.5	4122.4	4138.3	4159.1	4174.5	3.7	2.9	2.0	3952.5	4067.8	4148.6

Table 2.

U. S. Real Expenditures
for 1988-III and 1988-IV with Forecasts for 1989-I through 1991-IV

Georgia State University
College of Business Administration
Economic Forecasting Center
February 1989

	Period (Quarter Year)										Percentage Change			Annual Rate		
	III 88	IV 88	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	87/88	88/89	89/90	1988	1989	1990
1. Personal Consumption	2603.8	2621.9	2637.1	2647.8	2663.0	2671.7	2686.7	2698.3	2708.0	2713.1	2.8	2.5	1.8	2591.1	2654.9	2701.5
2. % Change(1982$, AR)	3.9	2.8	2.3	1.6	2.3	1.3	2.3	1.7	1.4	0.8						
3. Durable Goods	410.4	412.5	412.7	416.8	417.8	419.2	421.4	424.0	420.8	417.4	4.5	2.0	1.0	408.7	416.6	420.9
4. Autos, Trucks & Parts	178.7	177.7	176.3	179.2	179.5	180.0	182.4	184.5	182.2	179.0	4.0	0.9	1.8	177.2	178.8	182.0
5. Other Durable Goods	231.7	234.8	236.4	237.6	238.3	239.2	239.0	239.5	238.6	238.4	4.9	2.8	0.4	231.4	237.9	238.9
6. Nondurable Goods	904.5	908.7	912.9	910.7	916.7	915.8	921.0	921.9	926.3	926.8	1.0	1.6	1.1	899.9	914.0	924.0
7. Services	1288.9	1300.7	1311.5	1320.3	1328.5	1336.7	1344.3	1352.4	1360.9	1368.9	3.5	3.2	2.4	1282.6	1324.3	1356.6
8. Pvt Domestic Investment	726.1	717.1	737.9	746.3	73..7	746.3	739.6	749.7	717.1	705.8	7.0	2.9	-2.0	721.8	742.6	728.1
9. Residential Structures	191.6	197.4	197.5	194.9	195.5	193.6	190.4	186.6	189.9	193.6	-1.6	1.7	-2.7	192.0	195.4	190.1
10. Other Structures	125.8	124.0	122.1	121.6	121.4	121.1	121.4	121.6	121.1	121.2	-0.6	-2.5	-0.2	124.7	121.6	121.3
11. Producer's Durables	369.2	366.4	370.5	378.6	384.3	386.3	393.8	400.1	401.8	401.2	13.4	4.8	5.1	362.5	379.9	399.2
12. Change in Inventories	39.5	29.2	47.8	51.2	38.5	45.3	34.0	41.4	4.3	-10.2	----	----	----	42.5	45.7	17.4
13. Chg in Nonfarm Inv	40.4	36.6	35.6	47.3	36.5	47.8	31.6	40.3	2.6	-7.3	----	----	----	39.8	41.8	16.8
14. Net Exports	-93.9	-100.7	-95.6	-87.8	-87.4	-87.7	-82.1	-82.4	-80.3	-69.8	----	----	----	-99.1	-89.6	-78.7
15. Exports	514.0	517.6	530.7	543.5	555.4	560.9	568.1	577.4	585.2	590.7	17.7	8.7	6.0	503.7	547.6	580.4
16. Imports	607.9	618.3	626.3	631.3	642.8	648.6	650.2	659.8	665.5	660.5	8.3	5.7	3.4	602.7	637.3	659.0
17. Government Purchases	773.5	790.9	799.4	805.5	811.3	806.5	812.2	814.1	818.6	815.2	0.1	3.1	1.2	781.2	805.7	815.0
18. Federal Government	320.1	332.9	338.9	343.6	348.8	343.1	347.7	347.7	351.0	346.3	-3.2	4.7	1.3	328.1	343.6	348.2
19. Federal Purchases	195.9	208.1	213.9	218.8	224.0	218.2	222.7	222.7	225.8	221.0	-5.4	7.3	2.0	203.9	218.7	223.1
20. Value Added	124.2	124.8	125.0	124.8	124.8	124.9	125.0	125.0	125.2	125.3	0.5	0.6	0.2	124.2	124.9	125.1
21. State and Local Govt	453.4	458.0	460.5	461.9	462.5	463.4	464.5	466.4	467.6	468.9	2.7	2.0	1.0	453.1	462.1	466.9
22. State & Local Purch.	202.4	206.0	207.7	208.7	208.9	208.9	209.5	210.8	211.4	211.8	4.0	2.9	1.1	202.6	208.5	210.9
23. Value Added	251.0	252.0	252.8	253.2	253.6	254.5	255.0	255.6	256.2	257.1	1.6	1.2	1.0	250.5	253.5	256.0
24. Gross National Product	4009.4	4029.2	4078.8	4111.8	4126.6	4136.8	4156.4	4179.7	4163.4	4164.3	3.8	3.0	1.3	3995.0	4113.5	4166.0
25. % Change(1982$, AR)	2.5	2.0	5.0	3.3	1.4	1.0	1.9	2.3	-1.6	0.1						
26. Final Sales Demand	3969.9	4000.0	4031.0	4060.6	4088.1	4091.5	4122.4	4138.3	4159.1	4174.5	3.7	2.9	2.0	3952.5	4067.8	4148.6
27. % Change(1982$, AR)	2.0	3.1	3.1	3.0	2.7	0.3	3.1	1.6	2.0	1.5						
28. Gross Domestic Product	3987.0	4008.0	4057.1	4089.6	4104.9	4116.3	4138.0	4162.8	4148.7	4148.3	4.0	3.0	1.4	3974.7	4092.0	4149.5
29. Government Contribution	375.2	376.8	377.8	378.0	378.4	379.4	380.0	380.6	381.4	382.4	1.3	1.0	0.7	374.6	378.4	381.1
30. Private Domestic Product	3611.8	3631.2	3679.3	3711.6	3726.5	3736.9	3758.0	3782.2	3767.3	3765.9	4.3	3.2	1.5	3600.0	3713.6	3768.4
31. % Change(1982$, AR)	2.1	2.2	5.4	3.6	1.6	1.1	2.3	2.6	-1.6	-0.1						

Table 3.

Georgia State University
College of Business Administration
Economic Forecasting Center
February 1989

Income Related U. S. Gross National Product Components
for 1988-III and 1988-IV with Forecasts for 1989-I through 1991-IV

	Period (Quarter Year)										Percentage Change			Annual Rate		
	III 88	IV 88	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	87/88	88/89	89/90	1988	1989	1990
1. Compensation of Employees	2933.2	2996.3	3061.7	3115.5	3171.0	3224.2	3293.5	3349.8	3402.5	3451.6	8.3	8.2	7.4	2905.0	3143.1	3374.4
2. Wages & Salaries	2462.0	2517.9	2570.6	2616.9	2665.4	2711.8	2764.4	2812.9	2858.1	2901.4	8.4	8.4	7.3	2437.2	2641.2	2834.2
3. Manufacturing Ind	525.9	538.0	546.3	555.1	563.2	570.9	579.2	588.3	593.3	598.2	6.6	6.9	5.5	522.7	558.9	589.8
4. Other Producing Ind	175.4	178.1	179.4	177.7	180.5	180.9	182.0	181.0	183.7	186.7	8.4	3.9	2.1	172.9	179.6	183.4
5. Distributive Industry	585.8	599.5	611.8	625.4	638.4	651.8	664.5	677.2	686.5	697.1	8.9	9.1	7.8	578.9	631.9	681.3
6. Service Industry	725.8	746.9	768.1	788.8	808.1	827.6	850.0	871.2	892.8	912.2	10.8	11.4	10.4	716.5	798.2	881.6
7. Military Compensation	75.9	76.2	78.2	79.0	79.2	79.4	81.5	82.4	82.9	82.9	3.6	4.1	4.4	75.8	79.0	82.4
8. Other Government	373.2	379.2	386.8	390.9	396.0	401.2	407.2	412.8	418.9	424.3	6.8	6.3	5.6	370.3	393.7	415.8
9. Supplements to W & S	471.1	478.4	491.1	498.6	505.6	512.4	529.1	536.9	544.4	550.2	7.5	7.3	7.6	467.8	501.9	540.2
10. Proprietors Income	321.6	324.6	343.6	352.4	350.5	349.6	348.3	356.1	352.9	352.5	3.8	7.5	1.0	324.7	349.0	352.5
11. Business & Professional	290.7	298.2	304.8	308.7	310.3	311.4	312.6	314.9	315.3	315.0	6.8	7.1	1.8	288.4	308.8	314.5
12. Farm Proprietors	30.9	26.4	38.8	43.5	40.2	38.2	35.7	41.2	37.6	37.5	-15.4	10.5	-5.4	36.4	40.2	38.0
13. Rental Income	19.7	19.1	18.8	18.5	18.7	18.5	18.1	18.8	18.5	18.9	6.2	-5.0	-0.3	19.6	18.6	18.6
14. Net Interest	396.2	415.1	431.6	437.6	445.9	454.7	468.3	480.1	488.6	496.7	10.7	13.0	9.3	391.5	442.5	483.4
15. Corporate Profits(adj)	330.0	325.3	324.6	318.5	312.3	305.7	297.4	305.5	286.7	283.5	4.5	-2.8	-7.0	324.5	315.3	293.3
16. National Income	4000.7	4080.4	4161.5	4242.5	4298.4	4352.7	4425.6	4510.3	4529.2	4603.2	7.8	7.5	5.9	3965.0	4263.8	4517.1
17. Indirect Business Tax	392.3	398.6	404.7	411.5	418.1	424.7	431.5	439.7	446.3	453.1	6.2	6.6	6.7	389.0	414.8	442.7
18. Capital Consumption Adj	-18.2	-12.3	-8.7	-4.4	0.9	3.9	5.6	8.5	11.0	14.1				-18.5	-2.1	9.8
19. Capital Cons. Allowance	526.0	527.0	528.8	531.2	534.8	538.6	542.3	546.8	551.3	557.6	3.3	1.7	3.0	524.5	533.4	549.5
20. Business Transfers	31.1	31.8	32.6	33.4	34.2	35.1	35.9	36.7	37.5	38.5	9.1	10.2	9.8	30.7	33.8	37.2
21. Net Govt Subsidies	-8.8	-17.8	-11.3	-12.6	-11.4	-12.1	-15.6	-15.0	-17.0	-18.0	-12.0	-26.4	38.4	-16.1	-11.9	-16.4
22. Statistical Descrepancy	-11.6	-17.8	-17.2	-15.1	-16.7	-8.6	-8.3	-12.0	-15.9	-11.5				-11.6	-14.4	-11.9
23. Gross National Product	4909.0	4989.9	5090.4	5186.3	5258.3	5334.3	5417.0	5515.0	5562.4	5637.0	7.4	7.3	6.0	4861.8	5217.4	5532.9

Table 4.

Derivation of U. S. Personal Income
for 1988-III and 1988-IV with Forecasts for 1989-I through 1991-IV

Georgia State University
College of Business Administration
Economic Forecasting Center
February 1989

	Period (Quarter Year)										Percentage Change			Annual Rate		
	III 88	IV 88	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	87/88	88/89	89/90	1988	1989	1990
1. National Income	4000.7	4080.4	4161.5	4242.5	4298.4	4352.7	4425.6	4510.3	4529.2	4603.2	7.8	7.5	5.9	3965.0	4263.8	4517.1
Less:																
2. Adj. Corporate Profits	330.0	325.3	324.6	318.5	312.3	305.7	297.4	305.5	286.7	283.5	4.5	-2.8	-7.0	324.5	315.3	293.3
3. Social Insurance	196.7	200.1	208.2	211.2	214.3	217.2	228.9	231.7	234.5	237.2	13.4	9.0	9.6	195.1	212.7	233.1
Plus:																
4. Government Transfers	557.6	564.4	580.9	587.1	593.5	599.8	618.7	625.3	632.5	639.4	6.7	6.3	6.5	555.3	590.3	629.0
5. Social Security, etc	303.1	305.9	317.6	320.5	323.4	326.0	339.4	342.1	344.8	347.3	6.7	6.6	6.7	301.9	321.9	343.4
6. Unemployment Benefits	13.4	12.7	12.7	12.5	12.4	12.3	12.4	12.6	13.0	13.5	-8.7	-6.6	3.2	13.4	12.5	12.9
7. Veterans Benefits	17.1	16.9	17.2	17.3	17.4	17.4	17.8	18.0	18.1	18.2	2.4	1.8	4.0	17.0	17.3	18.0
8. Employees Retirement	81.6	82.4	84.6	86.0	87.5	89.3	91.5	93.1	94.8	96.3	7.9	6.3	8.1	81.7	86.9	93.9
9. A. F. D. C.	17.2	17.3	17.6	17.7	17.8	17.9	18.2	18.3	18.4	18.5	2.4	3.6	3.4	17.1	17.8	18.4
10. Other Govt Transfers	125.1	129.3	131.2	133.1	135.0	136.9	139.4	141.2	143.4	145.6	9.0	7.9	6.2	124.2	134.1	142.4
11. Business Transfers	31.1	31.8	32.6	33.4	34.2	35.1	35.9	36.7	37.5	38.5	9.1	10.2	9.8	30.7	33.8	37.2
12. Interest Transfers	185.7	190.4	194.2	200.0	204.7	208.7	212.2	217.4	222.0	225.5	6.6	9.2	8.6	184.9	201.9	219.3
13. Personal Dividends	97.3	99.4	100.7	102.1	103.5	104.9	106.2	108.4	109.3	110.3	8.7	6.7	5.6	96.3	102.8	108.6
Equals:																
14. Personal Income	4094.0	4185.1	4271.5	4365.6	4434.1	4501.2	4581.9	4666.0	4730.3	4793.8	7.5	8.1	6.8	4063.2	4393.1	4693.0
Less:																
15. Personal Tax Payments	586.5	598.0	607.3	631.1	636.9	649.6	655.8	682.1	690.0	707.8	3.5	6.9	8.3	590.3	631.2	683.9
Equals:																
16. Personal Disposable Inc	3507.5	3587.1	3664.2	3734.5	3797.2	3851.6	3926.1	3983.9	4040.3	4086.0	8.2	8.3	6.6	3472.9	3761.9	4009.1
Less:																
17. Personal Consumption	3261.2	3320.1	3371.0	3431.2	3490.9	3550.5	3613.3	3680.5	3739.6	3802.1	7.1	7.3	7.2	3226.0	3460.9	3708.9
18. Other Outlays	100.6	102.3	103.4	104.8	106.3	108.2	109.5	111.0	112.4	113.9	6.9	5.8	5.7	99.9	105.7	111.7
Equals:																
19. Personal Savings	145.7	164.6	189.8	198.5	200.0	192.9	203.3	192.4	188.3	170.0	41.0	32.9	-3.5	147.0	195.3	188.5
20. Savings Rate(%, AR)	4.2	4.6	5.2	5.3	5.3	5.0	5.2	4.8	4.7	4.2	30.0	22.9	-9.3	4.2	5.2	4.7

Table 5.

U. S. Federal Government Activity
for 1988-III and 1988-IV with Forecasts for 1989-I through 1991-IV

Georgia State University
College of Business Administration
Economic Forecasting Center
February 1989

	Period (Quarter Year)										Percentage Change			Annual Rate		
	III 88	IV 88	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	87/88	88/89	89/90	1988	1989	1990
1. Government Receipts	975.5	989.3	1012.4	1035.7	1045.5	1058.5	1084.7	1115.2	1123.6	1140.7	6.4	6.5	7.5	974.7	1038.0	1116.1
2. Personal Tax & Nontax	408.3	415.8	419.8	438.0	439.9	448.3	449.3	470.5	474.6	488.1	1.9	5.6	7.8	413.4	436.5	470.6
3. Corporate Profits Tax	113.1	111.3	112.5	110.9	112.0	110.1	110.6	111.9	109.7	107.2	4.7	0.5	-1.4	110.8	111.4	109.9
4. Indirect Business Tax	57.2	58.3	59.5	60.3	61.0	61.8	63.4	65.1	66.0	66.9	5.1	6.7	7.8	56.8	60.7	65.4
5. Social Security Contr	397.0	403.9	420.6	426.5	432.6	438.3	461.4	467.7	473.3	478.5	12.2	9.1	9.5	393.7	429.5	470.2
6. Government Expenditures	1099.0	1143.0	1159.7	1177.9	1190.6	1202.1	1236.5	1249.9	1269.1	1281.0	3.9	6.0	6.5	1116.1	1182.6	1259.1
7. Purchases of Goods and Services	367.7	393.2	401.4	407.2	411.7	408.9	420.6	424.2	431.5	429.3	-0.5	7.1	4.7	380.2	407.3	426.4
8. Defense	294.3	298.4	302.0	304.1	305.0	306.9	312.2	313.9	315.4	316.4	0.7	2.4	3.3	297.5	304.5	314.5
9. Durables	81.7	83.0	82.6	82.9	83.1	83.7	84.2	84.5	84.3	84.4	-7.4	-0.1	1.5	83.2	83.1	84.4
10. Nondurables	10.7	10.1	10.3	10.4	10.3	10.6	11.0	10.9	11.1	11.3	2.4	-3.3	6.5	10.8	10.4	11.1
11. Military Payroll	75.9	76.2	78.2	79.0	79.2	79.4	81.5	82.4	82.9	82.9	3.6	4.1	4.4	75.8	79.0	82.4
12. Civilian Payroll	37.0	37.3	38.4	38.5	38.6	38.7	39.7	39.8	40.0	40.1	3.9	3.8	3.5	37.1	38.6	39.9
13. Other Services	81.8	84.3	85.0	85.7	86.2	87.1	88.2	88.7	89.3	90.1	5.8	3.1	3.6	83.5	86.0	89.1
14. Structures	7.2	7.4	7.5	7.6	7.6	7.4	7.6	7.6	7.8	7.6	-0.7	4.9	1.7	7.2	7.5	7.6
15. Nondefense	73.4	94.9	99.4	103.1	106.7	102.0	108.4	110.3	116.1	112.9	-4.5	24.2	8.9	82.8	102.8	111.9
16. Durables	4.2	4.7	4.8	4.8	5.0	5.1	5.1	5.2	5.3	5.3	10.2	7.7	6.1	4.6	4.9	5.2
17. Nondurables	-16.4	3.1	5.8	8.8	11.3	5.9	10.6	11.2	15.6	11.7				-7.6	8.0	12.3
18. CCC Inventory Chg	-22.6	-4.0	-1.5	1.6	3.8	-1.4	2.5	2.9	7.6	3.5				-15.2	0.6	4.1
19. Other Nondurables	6.1	7.0	7.3	7.2	7.5	7.3	8.1	8.3	8.0	8.2	15.8	-2.7	11.3	7.5	7.3	8.2
20. Compensation	45.1	45.5	46.7	46.8	46.8	46.9	48.0	48.4	48.9	49.0	6.5	4.4	3.8	44.8	46.8	48.6
21. Other Services	31.9	33.9	34.2	34.9	35.5	36.1	36.8	37.5	38.1	38.8	14.9	6.4	7.5	33.1	35.2	37.8
22. Structures	8.6	7.7	7.9	7.8	8.1	8.0	7.9	8.0	8.2	8.1	-6.5	0.3	1.3	7.9	8.0	8.1
23. Transfer Payments	440.7	447.6	457.1	460.1	464.1	472.5	485.5	489.8	494.5	503.8	6.3	5.3	6.5	440.1	463.5	493.4
24. Grants-In-Aid to State and Local Govt	111.5	108.6	109.8	111.3	111.2	111.9	114.4	114.8	115.3	115.7	7.5	0.6	3.6	110.4	111.1	115.1
25. Net Interest Paid	154.9	159.8	163.6	169.8	174.9	178.9	182.3	187.7	192.0	195.0	7.8	11.4	10.2	154.2	171.8	189.3
26. Deficit of Government Enterprises	24.1	33.7	27.8	29.5	28.7	29.9	33.7	33.4	35.8	37.2	-3.6	-7.1	20.9	31.2	29.0	35.0
27. Federal Surplus	-123.5	-153.7	-147.3	-142.2	-145.1	-143.6	-151.8	-134.7	-145.5	-140.3	----	----	----	-141.4	-144.6	-143.1
28. State and Local Surplus	56.0	48.4	50.6	55.1	56.8	57.5	61.7	63.6	62.6	62.0	----	----	----	54.1	55.0	62.5
29. Total Government Surplus	-67.5	-105.3	-96.7	-87.1	-88.3	-86.1	-90.1	-71.1	-82.9	-78.3				-87.3	-89.6	-80.6
30. Federal Debt held by Individuals	1825.0	1868.4	1915.7	1930.9	1964.6	1999.1	2041.3	2059.1	2084.3	2109.1	7.9	7.6	6.2	1814.1	1952.6	2073.5

Table 6.

Georgia State University
College of Business Administration
Economic Forecasting Center
February 1989

Selected Economic Variables in the U. S. Economy
for 1988-III and 1988-IV with Forecasts for 1989-I through 1991-IV

	Period (Quarter Year)										Percentage Change			Annual Rate		
	III 88	IV 88	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	87/88	88/89	89/90	1988	1989	1990
PRIVATE ECONOMY - Annual Rate Changes in:																
1. Private Hourly Wage	5.5	5.5	6.0	4.7	5.7	5.7	7.0	5.5	5.9	5.7	4.7	5.5	5.9	--	--	--
2. Output Per Worker Hour	-1.3	-1.7	2.3	0.5	-0.5	-0.5	0.2	0.8	-2.3	-0.6	0.5	0.0	-0.2	--	--	--
3. Implicit Labor Cost	7.0	7.3	3.6	4.1	6.3	6.2	6.8	4.7	8.4	6.4	4.2	5.4	6.2	--	--	--
4. Private Price Deflator	4.8	4.8	2.7	4.4	4.2	5.0	4.1	5.1	5.2	5.6	3.1	4.2	4.7	--	--	--
PRICES																
5. Consumer Price Index	119.1	120.3	121.5	122.9	124.7	126.3	127.9	129.4	131.4	133.1	4.1	4.7	5.3	118.3	123.9	130.5
6. % Change (AR)	5.4	4.2	3.9	4.7	6.0	5.2	5.2	4.8	6.3	5.3						
7. Producer Price Index (Industrial Commodities)	106.9	107.5	108.9	110.2	111.2	112.1	113.6	114.9	116.0	117.0	3.6	4.1	4.3	106.3	110.6	115.4
8. % Change (AR)	3.3	2.4	5.2	4.9	3.7	3.3	5.5	4.7	3.9	3.5						
CORPORATE ECONOMY																
9. After Tax Profits	169.1	163.6	163.3	162.3	164.1	159.7	156.9	156.3	151.6	149.3	12.8	0.7	-5.4	161.2	162.4	153.5
10. Inventory Profits	-29.3	-20.7	-20.1	-20.3	-26.6	-23.8	-29.3	-20.5	-30.8	-27.2				-24.2	-22.7	-27.0
11. Genuine Profits	185.2	183.2	181.1	177.2	169.4	165.5	156.5	163.0	147.1	147.2	3.5	-5.2	-11.5	182.8	173.3	153.5
12. Dow-Jones Index - Mean Closing	2078.5	2130.6	2293.1	2264.3	2046.5	1972.3	1821.7	1872.5	1773.6	1845.9	-9.5	4.0	-14.7	2060.8	2144.1	1828.4
13. New York Composite Index - Mean Closing	150.95	154.79	160.35	161.27	151.72	149.55	144.84	147.65	138.66	143.98	-7.3	3.9	-7.7	149.9	155.7	143.8
FINANCIAL																
14. Monetary Base	281.2	284.4	291.3	296.1	300.7	305.3	310.3	315.8	320.5	326.2	6.9	7.1	6.7	278.7	298.4	318.2
15. Checkable Deposits	575.1	574.4	577.1	591.0	595.6	600.8	612.6	621.4	633.4	646.4	2.6	3.8	6.3	569.7	591.1	628.5
16. M1	782.4	784.9	791.2	809.2	817.6	826.8	842.8	856.1	872.1	889.2	4.2	4.7	6.6	775.0	811.2	865.1
17. Velocity of M1	6.240	6.325	6.400	6.375	6.398	6.420	6.399	6.416	6.356	6.315	3.3	2.5	-0.4	6.242	6.398	6.371
18. M2	3030.5	3052.6	3084.7	3143.2	3193.1	3246.1	3306.8	3361.6	3411.8	3466.7	5.1	5.3	6.9	3008.1	3166.8	3386.7
19. Velocity of M2	1.611	1.626	1.641	1.641	1.638	1.635	1.631	1.634	1.625	1.620	2.3	1.9	-0.7	1.608	1.639	1.627
20. Federal Funds	7.98	8.47	9.16	9.23	9.74	10.23	10.36	10.53	9.53	9.03	13.7	26.7	2.8	7.57	9.59	9.86
21. Prime Rate	9.71	10.18	10.50	10.50	11.13	11.86	12.00	12.00	11.43	10.76	13.6	18.1	5.0	9.32	11.00	11.55
22. 6 Month T-Bills	7.25	7.86	8.56	8.43	8.91	9.15	9.11	9.06	8.19	7.88	14.7	26.7	-2.3	6.92	8.76	8.56
23. Seasoned AAA Corps	9.96	9.51	9.52	9.47	9.92	10.27	10.22	10.07	9.76	9.43	3.6	0.9	0.8	9.71	9.80	9.87
24. FHA Mortgage Rate	10.50	10.39	10.54	10.41	10.83	11.14	11.06	10.94	10.64	10.29	1.3	3.8	0.0	10.34	10.73	10.73
ADDITIONAL INDICATORS																
25. Housing Starts	1468	1537	1447	1471	1425	1422	1358	1347	1386	1437	-8.8	-3.3	-4.1	1491	1441	1382
26. Single Family Starts	1064	1128	1063	1065	1024	1019	976	962	985	1026	-5.9	-4.2	-5.3	1088	1043	987
27. Unit Auto Sales	10.63	10.57	10.35	10.63	10.48	10.36	10.53	10.65	10.27	9.96	4.2	-1.9	-1.0	10.66	10.46	10.35
28. Civilian Employment	115.202	115.843	116.700	117.381	117.980	118.559	119.151	119.600	120.036	120.419	2.3	2.3	1.8	114.971	117.655	119.802
29. Unemployment Rate	5.5	5.3	5.2	5.0	5.0	4.9	4.8	4.8	4.9	5.0	-11.4	-8.4	-3.0	5.5	5.0	4.9
30. Industry Production Indx	138.3	139.8	141.2	142.7	143.4	143.8	144.3	145.6	142.7	141.3	5.6	4.1	0.5	137.2	142.8	143.5
31. Asset/Outlay Ratio	4.075	4.081	4.091	4.056	3.919	3.858	3.786	3.777	3.685	3.721	-4.1	-3.3	-6.0	4.117	3.981	3.742

Table 7.

U. S. Foreign Trade Accounts
for 1988-III and 1988-IV with Forecasts for 1989-I through 1991-IV

Georgia State University
College of Business Administration
Economic Forecasting Center
February 1989

	Period (Quarter Year)										Percentage Change			Annual Rate		
	III 88	IV 88	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	87/88	88/89	89/90	1988	1989	1990
MERCHANDISE TRADE (Not Seasonally Adjusted, Annual Rates)																
1. Merchandise Exports	316200	336586	343240	359680	353550	372080	384575	400975	396575	419700	26.3	11.8	12.1	319480	357138	400456
2. Food & Live Animals	28935	28885	29460	30350	31820	31560	33260	33140	33820	32580	37.6	16.7	7.8	26389	30798	33200
3. Beverages & Tobacco	4330	4748	4785	4870	4660	5090	4965	5015	4865	5420	23.0	7.6	4.4	4509	4851	5066
4. Crude Materials	22854	24885	24910	24760	25530	27260	27820	27760	28450	29930	20.8	3.8	11.2	24667	25615	28490
5. Mineral Fuels	8394	7861	7160	7990	7860	9820	8140	8960	8920	10560	3.4	2.9	11.4	7977	8208	9145
6. Animal & Vegetable Oil	1464	1394	1255	1210	1420	1270	1130	1070	1360	1180	49.6	-12.2	-8.1	1468	1289	1185
7. Chemicals	34165	30941	32620	34410	35020	34830	36930	38540	39620	41110	21.3	6.8	14.1	32048	34220	39050
8. Manufactured Goods	23636	23201	24030	25530	26110	25940	27710	29340	30260	30540	31.5	12.7	16.0	22541	25403	29463
9. Machinery, Trnspt. Eq.	130098	141151	146410	154350	148270	158360	165220	173040	169650	180820	23.7	13.0	13.4	134429	151848	172183
10. Misc. Manufacturing	24999	24990	25530	26930	26860	27420	28210	29540	29070	29870	25.3	9.8	9.3	24312	26685	29173
11. Commodities, n.e.c.	25200	35260	33460	34160	31720	35420	35270	36750	33620	39460	41.5	16.8	7.7	28837	33690	36275
12. Foreign Merchandise	12127	13272	13620	15120	14280	15110	15920	17820	16940	18230	36.6	18.1	18.5	12304	14533	17228
13. Merchandise Imports	438256	461759	456798	474274	476326	501215	492135	513886	510854	521102	8.6	8.2	6.8	440852	477153	509494
14. Food & Live Animals	18598	19511	19250	19560	19520	20630	20680	21020	20870	21760	-3.4	-0.6	6.8	19857	19740	21083
15. Beverages & Tobacco	4149	5141	4660	4690	4760	5460	4930	4980	5130	5872	2.7	16.0	6.9	4216	4893	5228
16. Crude Materials	13467	13879	14160	14930	15260	15520	16430	17120	17260	16830	16.9	11.1	13.0	13477	14968	16910
17. Mineral Fuels	40602	36950	43593	44159	45041	49300	50915	55656	56324	57820	-8.2	12.2	21.2	40585	45523	55179
18. Animal & Vegetable Oil	980	1102	1065	1015	1085	965	880	820	930	870	50.9	20.4	-15.3	857	1033	875
19. Chemicals	19316	19953	21120	21040	21100	21680	23030	22870	23070	23090	22.5	6.9	8.4	19868	21235	23015
20. Manufactured Goods	62401	64800	66110	68340	69560	71230	72750	74380	75260	75850	16.6	10.6	8.4	62209	68810	74560
21. Machinery, Trnspt. Eq.	188725	211889	203530	214430	205770	222640	213560	225680	213340	223420	10.4	7.8	3.5	196365	211593	219000
22. Misc. Manufacturing	76967	74784	71450	73760	81205	79910	76930	78420	85210	82370	8.6	8.2	5.4	70778	76581	80733
23. Commodities, n.e.c.	13092	13750	11860	12350	13025	13880	12030	12940	13460	13220	2.1	1.1	1.0	12639	12779	12913
FOREIGN TRANSACTIONS - GNP ACCOUNTS (Seasonally Adjusted, Annual Rates)																
24. Total Exports	536.1	543.8	562.0	581.0	601.5	614.2	629.4	646.7	663.0	677.5	21.2	13.7	10.9	518.7	589.7	654.2
25. Mdse Exports	331.0	334.0	344.2	354.7	368.6	376.6	385.6	395.9	406.6	416.7	25.9	12.6	11.1	320.7	361.0	401.2
26. Factor Income	116.1	121.9	128.2	133.9	138.8	142.8	145.3	149.6	152.8	156.9	16.3	21.7	11.2	111.7	135.9	151.2
27. Other Services	89.0	87.9	89.6	92.4	94.1	94.8	98.5	101.2	103.6	103.9	11.8	7.4	9.8	86.3	92.7	101.8
28. Total Imports	616.0	634.1	651.4	662.9	682.0	698.5	710.7	729.7	744.7	748.3	11.0	10.1	8.9	611.9	673.7	733.4
29. Mdse Imports	448.6	457.8	468.8	474.8	486.3	496.2	502.1	513.9	520.9	521.1	8.2	7.8	6.8	446.9	481.5	514.5
30. Factor Income	89.3	96.3	101.1	105.9	111.1	116.4	121.3	127.3	133.2	135.3	31.7	23.9	19.0	87.7	108.6	129.3
31. Other Services	78.1	80.0	81.5	82.2	84.6	85.7	87.3	88.5	90.6	91.9	8.1	8.0	7.3	77.3	83.5	89.6
32. Net Transfer Payments	13.3	17.8	12.7	11.7	11.3	16.0	12.2	11.8	11.4	16.1	2.8	-7.0	-0.4	13.9	12.9	12.9
33. Government Interest	27.8	28.4	29.1	30.5	31.9	33.0	34.2	35.5	36.6	37.4	13.9	13.6	15.4	27.4	31.1	35.9
34. Net Foreign Investment	-121.1	-136.5	-131.2	-124.1	-123.7	-133.3	-127.7	-130.3	-129.7	-124.3	----	----	----	-134.5	-128.1	-128.0
35. Trade Weighted Value of Dollar (3/73 = 100)	97.6	93.0	96.3	93.6	92.0	88.6	90.6	87.8	85.3	83.7	-4.3	-0.1	-6.2	92.8	92.6	86.9

Table 8.

Personal Consumption Expenditure Implicit Price Deflators
for 1988-III and 1988-IV with Forecasts for 1989-I through 1991-IV

Georgia State University
College of Business Administration
Economic Forecasting Center
February 1989

	Period (Quarter Year)										Percentage Change			Annual Rate		
	III 88	IV 88	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	87/88	88/89	89/90	1988	1989	1990
1. Durable Goods	110.4	111.3	112.3	113.1	114.1	115.1	116.0	117.1	118.3	119.2	2.0	3.2	3.5	110.1	113.7	117.6
2. Percent Change(AR)	3.0	2.0	3.5	2.8	3.7	3.6	2.9	3.9	4.1	3.2						
3. Automobiles	117.6	118.7	119.7	120.5	121.6	122.9	123.7	124.8	126.4	127.6	2.2	3.3	3.7	117.4	121.2	125.6
4. Percent Change(AR)	3.6	3.6	3.6	2.5	3.8	4.3	2.6	3.7	5.1	3.8						
5. Furniture	99.1	99.6	100.2	100.6	101.2	101.6	101.8	102.4	102.8	103.1	0.7	2.0	1.6	98.9	100.9	102.5
6. Percent Change(AR)	2.0	2.0	2.7	1.5	2.4	1.4	1.0	2.1	1.7	1.2						
7. Other Durables	117.7	119.9	121.5	123.1	124.8	126.6	128.6	130.7	132.7	134.7	5.0	5.6	6.2	117.4	124.0	131.7
8. Percent Change(AR)	3.2	7.9	5.3	5.4	5.6	6.0	6.5	6.5	6.5	6.1						
9. Nondurables	117.3	118.3	118.9	120.9	122.0	123.8	125.1	127.0	128.3	130.3	3.8	4.4	5.1	116.4	121.4	127.6
10. Percent Change(AR)	4.5	3.6	2.0	6.9	3.7	6.0	4.1	6.2	4.1	6.5						
11. Food	123.2	124.2	125.0	126.9	129.0	130.5	131.7	133.2	134.7	136.2	4.1	5.1	4.8	121.7	127.8	134.0
12. Percent Change(AR)	9.0	3.4	2.6	6.2	6.7	4.8	3.7	4.6	4.6	4.5						
13. Apparel	114.7	117.9	117.4	120.3	118.7	121.9	122.4	125.8	125.2	128.4	4.2	3.3	4.9	115.7	119.6	125.5
14. Percent Change(AR)	-8.2	11.5	-1.7	10.2	-5.1	11.1	1.8	11.6	-2.0	10.7						
15. Gasoline and Oil	80.9	79.2	78.5	80.3	80.7	81.9	83.3	84.4	86.8	88.9	0.9	1.6	6.9	79.1	80.3	85.8
16. Percent Change(AR)	10.2	-8.0	-3.7	9.2	2.5	5.7	7.1	5.5	11.7	10.3						
17. Fuel Oil	77.7	73.8	76.3	77.5	76.9	78.3	79.8	80.4	81.8	84.8	0.4	0.5	5.8	76.9	77.3	81.7
18. Percent Change(AR)	-6.0	-18.7	14.5	6.7	-3.1	7.5	7.9	2.9	7.2	15.4						
19. Other Nondurables	131.0	132.8	134.3	135.9	137.8	139.7	141.6	143.6	145.6	147.5	4.5	4.9	5.6	130.5	136.9	144.6
20. Percent Change(AR)	3.3	5.8	4.5	4.8	5.7	5.6	5.7	5.7	5.8	5.2						
21. Services	135.6	137.3	138.9	140.8	142.7	144.7	146.7	148.9	151.0	153.2	4.9	5.2	5.8	134.8	141.8	150.0
22. Percent Change(AR)	4.8	5.1	4.9	5.4	5.6	5.7	5.9	6.0	5.7	6.1						
23. Housing	137.6	139.3	140.8	142.3	144.1	145.9	147.7	149.6	151.6	153.6	4.8	4.7	5.1	136.9	143.3	150.7
24. Percent Change(AR)	5.5	4.8	4.5	4.4	5.1	5.1	5.0	5.3	5.5	5.4						
25. Electricity and Gas	112.9	115.0	115.7	116.8	117.6	119.3	120.3	121.9	122.7	124.4	0.8	3.7	4.2	113.2	117.3	122.3
26. Percent Change(AR)	0.4	7.8	2.4	3.7	3.0	5.7	3.6	5.1	2.8	5.7						
27. Other Household Opns	128.0	128.9	129.3	130.7	131.3	132.3	133.5	134.9	136.2	137.7	2.0	2.5	3.6	127.6	130.9	135.5
28. Percent Change(AR)	0.9	2.9	1.1	4.3	2.1	2.8	3.6	4.3	3.9	4.6						
29. Transportation	125.8	127.1	128.6	130.7	132.7	134.8	136.9	138.9	141.1	143.3	5.2	5.4	6.4	124.9	131.7	140.1
30. Percent Change(AR)	1.6	4.2	4.7	6.7	6.4	6.6	6.3	6.1	6.3	6.5						
31. Medical Care	144.8	147.1	149.6	152.3	155.0	157.8	160.8	163.8	166.7	169.7	6.6	7.3	7.5	143.2	153.7	165.3
32. Percent Change(AR)	8.5	6.5	6.9	7.5	7.2	7.4	7.8	7.6	7.3	7.4						
33. Other Services	135.8	137.2	138.8	140.5	142.4	144.2	146.2	148.2	150.1	152.2	5.0	4.7	5.4	135.2	141.5	149.2
34. Percent Change(AR)	4.1	4.3	4.7	5.0	5.5	5.1	5.7	5.6	5.2	5.8						

Table 9.

Gross National Product Implicit Price Deflators
for 1988-III and 1988-IV with Forecasts for 1989-I through 1991-IV

Georgia State University
College of Business Administration
Economic Forecasting Center
February 1989

	Period (Quarter Year)										Percentage Change			Annual Rate		
	III 88	IV 88	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	87/88	88/89	89/90	1988	1989	1990
1. Gross National Product	122.4	123.8	124.8	126.1	127.4	128.9	130.3	131.9	133.6	135.4	3.4	4.2	4.7	121.7	126.8	132.8
2. Percent Change(AR)	4.7	4.7	3.3	4.2	4.2	4.8	4.4	5.0	5.3	5.5						
3. Personal Consumption	125.2	126.6	127.8	129.6	131.1	132.9	134.5	136.4	138.1	140.1	4.2	4.7	5.3	124.5	130.4	137.3
4. Percent Change(AR)	4.3	4.5	3.8	5.8	4.7	5.6	4.9	5.8	5.1	5.9						
5. Consumer Price Index	119.1	120.3	121.5	122.9	124.7	126.3	127.9	129.4	131.4	133.1	4.1	4.7	5.3	118.3	123.9	130.5
6. Percent Change(AR)	5.6	4.1	4.1	4.7	6.0	5.2	5.2	4.8	6.3	5.3						
7. Private Domestic Invest	106.4	107.1	108.2	108.9	109.6	110.5	111.0	111.9	112.8	113.7	0.4	3.1	2.8	106.1	109.3	112.3
8. Percent Change(AR)	1.5	2.7	4.3	2.7	2.4	3.4	1.7	3.5	3.2	3.2						
9. Structures	114.3	115.1	115.9	116.7	117.8	118.8	120.0	121.3	122.5	123.8	2.7	2.8	3.9	114.1	117.3	121.9
10. Percent Change(AR)	1.8	2.8	2.8	2.8	3.8	3.4	4.1	4.4	4.0	4.3						
11. Producer's Durables	94.8	96.9	97.5	98.4	98.8	99.4	100.1	100.8	101.7	102.4	-1.0	3.4	2.8	95.3	98.5	101.3
12. Percent Change(AR)	0.8	9.2	2.5	3.7	1.6	2.5	2.8	2.8	3.6	2.8						
13. Residential Structures	119.6	119.7	120.0	120.6	121.5	122.7	124.0	125.2	126.6	128.2	2.9	1.4	4.0	119.6	121.2	126.0
14. Percent Change(AR)	0.3	0.3	1.0	2.0	3.0	4.0	4.3	3.9	4.5	5.2						
15. Exports	104.3	105.1	105.9	106.9	108.3	109.5	110.8	112.0	113.3	114.7	2.9	4.6	4.7	103.0	107.7	112.7
16. Percent Change(AR)	8.9	3.1	3.1	3.8	5.3	4.5	4.8	4.4	4.7	5.0						
17. Imports	101.3	102.5	104.0	105.0	106.1	107.7	109.3	110.6	111.9	113.3	2.6	4.1	5.3	101.5	105.7	111.3
18. Percent Change(AR)	-0.4	4.8	6.0	3.9	4.3	6.2	6.1	4.8	4.8	5.1						
19. Federal	114.9	118.1	118.4	118.5	118.0	119.2	121.0	122.0	122.9	124.0	2.8	2.3	3.3	115.9	118.5	122.5
20. Percent Change(AR)	-1.4	11.6	1.0	0.3	-1.7	4.1	6.2	3.3	3.0	3.6						
21. Federal Purchases	107.0	112.5	111.3	111.0	110.3	111.8	112.9	113.9	115.0	116.4	1.7	1.9	3.1	109.0	111.1	114.6
22. Percent Change(AR)	-4.4	22.2	-4.2	-1.1	-2.5	5.6	4.0	3.6	3.9	5.0						
23. Federal Value Added	127.3	127.4	130.6	131.7	131.9	132.1	135.4	136.5	137.2	137.3	3.9	3.5	3.8	127.1	131.6	136.6
24. Percent Change(AR)	0.3	0.3	10.4	3.4	0.6	0.6	10.4	3.3	2.1	0.3						
25. State & Local	129.6	130.8	132.2	133.6	135.3	136.9	138.6	140.3	142.0	143.7	4.7	4.5	4.9	128.8	134.5	141.2
26. Percent Change(AR)	4.8	3.8	4.4	4.3	5.2	4.8	5.1	5.0	4.9	4.9						
27. State/Local Purchases	118.5	119.1	120.1	121.3	122.8	124.4	125.9	127.4	129.1	130.7	3.8	3.8	5.0	117.7	122.2	128.3
28. Percent Change(AR)	4.2	2.0	3.4	4.1	5.0	5.3	4.9	4.9	5.4	5.1						
29. State/Local Value Added	138.6	140.3	142.1	143.7	145.5	147.2	149.0	150.9	152.7	154.5	5.5	5.0	4.9	137.7	144.6	151.8
30. Percent Change(AR)	5.1	5.0	5.2	4.6	5.1	4.8	5.0	5.2	4.9	4.7						

Table 10.

Details of Private Consumption in the U. S.
for 1988-III and 1988-IV with Forecasts for 1989-I through 1991-IV

Georgia State University
College of Business Administration
Economic Forecasting Center
February 1989

	Period (Quarter Year)										Percentage Change			Annual Rate		
	III 88	IV 88	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	87/88	88/89	89/90	1988	1989	1990
Current Dollars																
1. Durable Goods	452.9	459.3	463.5	471.4	476.8	482.7	488.7	496.4	497.6	497.5	6.7	5.3	4.5	450.0	473.6	495.1
2. Autos, Trucks & Parts	210.2	210.9	211.1	215.9	218.3	221.2	225.6	230.3	230.3	228.4	6.2	4.1	5.6	208.0	216.6	228.7
3. Furniture	159.5	162.4	164.3	165.5	166.9	167.8	168.3	169.4	169.6	169.8	7.2	4.5	1.9	159.0	166.1	169.3
4. Other	83.2	86.0	88.1	90.0	91.6	93.7	94.8	96.7	97.7	99.3	6.6	9.6	6.9	82.9	90.9	97.1
5. Nondurable Goods	1060.8	1075.2	1085.6	1101.3	1118.6	1134.0	1151.9	1170.4	1188.0	1207.4	4.9	6.0	6.3	1047.2	1109.9	1179.4
6. Food	558.9	565.5	571.6	580.7	590.9	598.9	606.0	614.2	622.2	630.2	4.8	6.1	5.6	551.7	585.5	618.2
7. Clothing & Shoes	188.4	193.0	193.6	194.5	196.6	198.9	202.6	206.6	208.7	212.9	4.5	5.2	6.0	186.3	195.9	207.7
8. Gasoline & Oil	80.5	79.8	79.6	81.7	82.6	84.0	85.7	87.2	89.9	92.3	2.4	4.0	8.3	78.9	82.0	88.8
9. Fuel Oil & Coal	17.4	17.7	17.7	17.6	18.0	18.8	19.4	19.3	19.8	20.1	7.3	4.0	9.0	17.3	18.0	19.7
10. Other	215.6	219.2	223.1	226.8	230.5	233.4	238.2	243.1	247.4	251.9	6.5	7.2	7.3	213.1	228.5	245.2
11. Services	1747.5	1785.6	1821.9	1858.5	1895.5	1933.8	1972.7	2013.7	2054.4	2097.2	8.6	8.6	8.4	1728.9	1877.4	2034.5
12. Housing	506.0	513.0	521.1	529.1	538.2	547.3	556.4	566.2	576.5	586.9	7.2	6.5	7.0	501.4	533.9	571.5
13. Utilities	94.6	96.5	97.2	98.9	100.7	102.7	104.1	105.9	108.1	110.6	4.8	7.3	7.3	93.1	99.9	107.2
14. Other	105.1	106.5	107.3	109.1	110.2	111.5	112.9	114.5	116.0	117.6	6.4	5.6	5.2	103.8	109.5	115.3
15. Transportation	118.5	122.4	125.6	128.7	131.5	134.7	138.0	141.3	144.6	147.9	8.0	11.1	9.9	117.2	130.1	143.0
16. Medical Care	410.4	423.1	435.3	448.1	460.5	473.1	486.6	500.4	513.8	527.8	12.0	12.5	11.6	403.8	454.3	507.2
17. Other	512.9	524.1	535.4	544.6	554.4	564.5	574.7	585.4	595.4	606.4	8.1	7.8	7.4	509.8	549.7	590.5
Constant Dollars																
18. Durable Goods	410.4	412.5	412.7	416.8	417.8	419.2	421.4	424.0	420.8	417.4	4.5	2.0	1.0	408.7	416.6	420.9
19. Autos, Trucks & Parts	178.7	177.7	176.3	179.2	179.5	180.0	182.4	184.5	182.2	179.0	4.0	0.9	1.8	177.2	178.8	182.0
20. Furniture	161.0	163.1	163.9	164.5	164.9	165.2	165.3	165.5	165.0	164.7	6.5	2.4	0.3	160.8	164.6	165.1
21. Other	70.7	71.7	72.5	73.1	73.4	74.0	73.7	74.0	73.6	73.7	1.5	3.7	0.7	70.6	73.3	73.8
22. Nondurable Goods	904.5	908.7	912.9	910.7	916.7	915.8	921.0	921.9	926.3	926.8	1.0	1.6	1.1	899.9	914.0	924.0
23. Food	453.8	455.3	457.3	457.6	458.1	458.9	460.1	461.1	461.9	462.7	0.7	1.0	0.8	453.4	458.0	461.5
24. Clothing & Shoes	164.2	163.7	164.9	161.7	165.6	163.2	165.5	164.2	166.7	165.8	0.3	1.8	1.0	161.0	163.9	165.6
25. Gasoline & Oil	99.5	100.7	101.4	101.8	102.3	102.6	102.9	103.3	103.6	103.8	1.5	2.3	1.3	99.7	102.0	103.4
26. Fuel Oil & Coal	22.4	24.0	23.2	22.7	23.4	24.0	24.3	24.0	24.2	23.7	6.9	3.4	3.1	22.6	23.3	24.1
27. Other	164.6	165.0	166.1	166.9	167.3	167.1	168.2	169.3	169.9	170.8	1.9	2.2	1.6	163.3	166.9	169.6
28. Services	1288.9	1300.7	1311.5	1320.3	1328.5	1336.7	1344.3	1352.4	1360.9	1368.9	3.5	3.2	2.4	1282.6	1324.3	1356.6
29. Housing	367.7	368.4	370.1	371.8	373.5	375.1	376.7	378.4	380.2	382.0	2.2	1.7	1.8	366.3	372.6	379.3
30. Utilities	83.8	83.9	84.0	84.7	85.6	86.1	86.5	86.9	88.1	88.9	4.0	3.5	2.9	82.2	85.1	87.6
31. Other	82.1	82.6	83.0	83.5	83.9	84.3	84.6	84.9	85.2	85.4	4.2	3.0	1.6	81.3	83.7	85.0
32. Transportation	94.2	96.3	97.7	98.5	99.1	99.9	100.8	101.7	102.5	103.2	5.0	5.4	3.3	93.8	98.8	102.1
33. Medical Care	283.4	287.6	291.0	294.2	297.1	299.8	302.6	305.5	308.2	311.0	5.1	4.9	3.8	281.9	295.5	306.8
34. Other	377.7	381.9	385.7	387.6	389.3	391.5	393.1	395.0	396.7	398.4	2.9	3.0	1.9	377.2	388.5	395.8

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FORECAST OF THE NATION

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1989-II–1991-I

GEORGIA STATE UNIVERSITY
COLLEGE OF BUSINESS ADMINISTRATION

May 1989
Dr. Donald Ratajczak, Director

ECONOMIC FORECASTING CENTER

GROWTH, INFLATION AND INTEREST RATES PROJECTED TO FALL

Dr. Donald Ratajczak
Director
Economic Forecasting Center

SUMMARY

Traditionally, economic activity slows before inflation eases. Then interest rates begin falling. As a result, a significant slowing of inflation in a short time period can be achieved only with a substantial slowing of economic activity. Indeed, inflationary relief does not develop until after a recession has begun.

This forecast still foresees a mild recession during 1990, but the degree of decline is so small that the official arbiters of recessions, the National Bureau of Economic Research, may choose not to so designate the event. The reason for only a mild period of weakness is the reduction of inflationary pressures that clearly is accompanying this slowing of growth. The **CPI** reaches its high rate of increase during this spring, at slightly under an 8% annual rate, and then slows to 5% gains during the second half of the year. Despite an estimated lagged response of service prices, the **CPI** will have slowed to a 5.2% rate of increase in 1990 from a 5.4% gain this year. Reductions to less than 5% seem likely in 1991.

Of course, the economic slowing that high interest rates already have fostered will be apparent in sharp declines in housing activity. Single family starts are expected to be less than a million in 1989 and decline to 960,000 in 1990. Apartment activity appears stuck at 400,000 both years. Of course, activity will be increasing throughout 1990 after falling throughout 1989.

Although autos should be aided by incentives and preserve sales near 1988 levels in 1989 and 1990, weakness in trucks and a decided degree of weakness in household furnishings should lower consumer durable purchases later this year and in 1990. More modest rates of growth also are expected for nondurables and services as higher prices discourage spending. The savings rate should fall slightly in 1990 as income growth weakens, but a decided shift toward savings appears to be developing.

High interest rates also have strengthened the dollar. As a result, export growth is not as robust as last year while import substitution

has decreased significantly. Export growth still is expected to be stronger than imports, but the 10 percentage point differential in growth will narrow to 4 percentage points in 1989 and only 2% in 1990.

Fortunately, capital spending should remain strong, with inflation adjusted gains of nonauto durables rising 8% in 1989 and 4% in 1990. Declines in purchases of trucks and fleet autos should pare those gains, however.

Although 3% real growth still appears likely for 1989, economic growth should slow to 0.8% in 1990. With negative growth in the second and third quarters of next year, this sluggishness could classify as a recession.

A spurt of industrial activity during the summer months might lead to one more increase in interest rates. However, rates will be falling by year-end and should decline to a 10% prime and an 8.25 yield on long-term government bonds by the end of 1990.

Slow improvement in the trade balances along with a decline in interest rates should lower the attractiveness of dollar based assets, leading to weakness in the dollar later this year and in 1990. By the end of 1990, the dollar is expected to fall 10% from current levels. Of course, the renewed downtrend in the dollar will again improve trade balances leading to improved economic growth, stable interest rates, and stability in the dollar at the end of the 1990 slowdown.

OUTLOOK

Apparently, the magnitude of the monetary restraint led to the simultaneous weakening of commodity inflation as economic growth slows. Both **M1** and **M2** have experienced minimal growth during the winter. Further modest gains are expected for the monetary aggregates in the spring. It still is possible that the magnitude of monetary restraint has caused the drop in commodity based inflation so early in the slowing of growth. If so, consumer, trade and construction activity could fall more sharply in the next few months than currently projected. If so, the next recession will be upon us and no one will have difficulty labelling it. Certainly such substantial monetary restraint should have some impact upon the economy.

Whether or not the monetary restraint has been excessive for an excessively long period of time, monetary restraint certainly has impacted the interest sensitive sectors. On the cost side of the ledger are reduced housing starts, more reluctant purchases of consumer durables, and a strong dollar that reduces export opportunities. On the positive side are subdued inventories that preclude any serious production correction.

Nevertheless, enough commodity inflation has surfaced to sharply increase inventory profits. The IVA rose to more than $33 billion in the first quarter from $19 billion a year ago. This has caused corporations to reduce their contributions to the credit markets. As a result, banks have had difficulty maintain their deposit levels. (Some thrifts, however, have been forced to shrink in order to increase the capital base relative to deposits. This has been a major factor in the sharp decline in **M1**). Some stock market investors already appear to be misreading the strength of profits but assuming those IVA gains can recur. As a result, equity values are about 18% higher than they should be according to our current estimates. A decline in the Dow-Jones to slightly more than 2000 is anticipated before the end of this year.

More importantly, such profit illusion often leads to excessive hiring or reduced firing. The result is a deterioration in the productivity of American industry, which raises costs and lowers market opportunities abroad. Thus, a profit squeeze could materialize later this year.

In former periods of profit illusion, employment continues growing strongly, leading to some consumer spending support, while corporate borrowings rise. Some temporary increases in interest rates could develop. In the meantime, unemployment rates remain near current levels even as economic activity slows. Then, profits fall sharply as commodity inflation recedes and unemployment rises as orders are being cancelled. Eventually, capital spending also falls, leading to a delayed but potentially significant economic decline.

Fortunately, the early slowing of commodity inflation should prevent any serious production errors from occurring because of profit illusion. Oil prices already may have peaked this year. While prices are expected to go even higher next year because of increased world demand and limited change in supply, at $22 in 1990, oil still will be selling less than the $27 in 1987.

Barring another drought, acreage has been increased sufficiently to prevent any further acceleration of food prices. Excluding adverse weather, food prices should regain the 3 to 5% price channel that existed prior to the 1988 drought.

Unfortunately, the earlier flare-up of commodity prices will have some impact upon wage demands. Wage compensation in 1989 and 1990 are expected to rise 5.5% and 5.9% respectively, up from a 4.7% gain in 1988. An expected increase in the minimum wage will have a minor impact upon that 1990 performance. However, an increase in the unemployment rate to 5.5% should prevent any serious surge in wage pressures.

This reduced economic growth will prevent the federal deficit from improving further during the next two years. As measured by the

national income accounts, the deficit should reach $160 billion in 1989 and grow further to $175 billion in 1990. Moreover, the operating deficits at the state and local levels will remain distressingly large.

Because long-term interest rates are expected to fall, providing investors with a current yield of nearly 9% and a capital gain or 6-7% more in the next twelve months, investors should be accumulating long-term bonds at the present time. A slight setback is possible this summer, but such investments should be rewarding. As a result, cash and cash equivalent positions should be reduced (e.g. reduce holdings in money markets and certificates of deposit). Because of the profit illusion phenomenon, stock investments probably are too early to be aggressively accumulated. Certainly, the interest sensitive issues such as utilities, banks and some building materials could be bought, especially if current losses are providing cheap opportunities in the latter group. On the whole, however, the long-term bond portfolio should provide the largest gains during the next twelve months according to this forecast.

ASSUMPTIONS

Because of rising commodity inflation, the Federal Reserve may have been more restrictive than it normally would have desired. The absence of money growth, an inverted yield curve and a strong dollar all attest to substantial Federal Reserve restraint. This restraint is expected to ease gradually in the second quarter and then shift to modest ease during the second half of this year. Initially, interest rates and the dollar are not expected to respond to the shift in Federal Reserve policy, but a slowing in inflationary pressures will allow substantial reductions in interest rates and an end to the interest rate inversion before the end of this year. These monetary assumptions generally are shown on table 6.

Table 5 generally outlines the budgetary assumptions. No substantial tax initiatives were assumed this year or in 1990. Social security tax increases to .0770 for employer and employee in 1990 were mandated nearly a decade ago. Rising excise taxes are expected to be within the changes of the past few years. Effective personal and corporate income tax rates are expected to remain unchanged over the forecast period. Defense spending is expected to fall in real terms by about a percent per year, while crop support levels are expected to gradually be lowered.

The thrift bailout is treated as external borrowings, adding to the government securities outstanding and the debt held by individuals, but it does not add to the government deficit except to the extent that the interest on those debts exceed the premiums paid to the bank insurance corporation. This excess is treated as an increase in the deficit of government enterprises and rises only by the excess interest expense.

Other forecasted assumptions are as follows:

a. Higher oil prices are expected to slow the import of oil to gains of only 1.5% and 1.2% in the next two years, following an 8.3% increase in 1988. Prices of imported oil are expected to average $18.59 in 1989 and $21.92 in 1990. No change in excise taxes was assumed for energy materials.

b. No changes are expected in cost-of-living government programs. Adjustments of 5.5% and 5.0% were used for the next two years.

c. The wage base was assumed to be $51,500 in 1990, and $53,500 in 1991. No change was assumed in the catastrophic insurance tax or any other tax treatment of benefits.

d. Minimum wage legislation including a six month training wage but raising the minimum to only $4.25 over three years was assumed. Legislated benefits for health and childcare also were assumed to be effective in 1990, raising wage costs by 0.3% in 1990.

e. World trade is expected to grow 4% in 1990 and 3% in 1991.

f. No significant work stoppages were assumed during the forecast period. (Eastern airlines was assumed to return to operations in the winter of 1989).

CONCLUSION

Restrictive monetary policy clearly has encouraged consumer savings, reduced housing activity, and strengthened the value of the dollar. This latter factor, in turn, has slowed the growth of exports and prevented any serious import substitution from developing. As a result, Economic growth is slowing significantly. At the same time, a strong dollar and high interest rates have lead to reduced inflationary pressures (the latter through a desire to maintain modest inventory holdings). Therefore, prices also have been slowing. The result of this simultaneous weakness is some moderation of inflation and a reversal of monetary stringency before the end of this year.

Unfortunately, enough slowing will have developed to generate several quarters of production weakness in 1990. This may be called a recession, though it will be relatively mild. Economic activity should be responding to lower interest rates and a rebound in trade before weakness flows too far. Thus, a recession still seems likely early in 1990, but interest rates are near their peak and should fall sharply next year. Also, inflation should not get worse than early in 1989. Thus, the recession will reduce the inflation and interest rate burdens that threaten longer-term economic problems for the economy.

Table 1.

U. S. Expenditures in Current Dollars
for 1988-IV and 1989-I with Forecasts for 1989-II through 1991-I

Georgia State University
College of Business Administration
Economic Forecasting Center
May 1989

	Period (Quarter Year)										Percentage Change			Annual Rate		
	IV 88	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	87/88	88/89	89/90	1988	1989	1990
1. Personal Consumption	3326.4	3380.4	3448.4	3513.3	3564.8	3624.0	3687.4	3743.8	3814.8	3886.1	7.1	7.7	6.9	3227.6	3476.7	3716.3
2. % Change(AR)	8.2	6.7	8.3	7.7	6.0	6.8	6.6	6.8	7.8	7.7						
3. Durable Goods	464.0	461.5	466.6	471.2	469.0	472.1	474.3	471.5	478.7	486.7	6.9	3.5	1.5	451.1	467.1	474.2
4. Autos, Trucks & Parts	213.2	208.2	212.3	217.9	216.5	219.1	221.2	219.2	224.8	230.9	6.6	2.5	3.4	208.6	213.7	221.1
5. Other Durable Goods	250.8	253.3	254.3	253.3	252.5	253.0	253.1	252.3	253.9	255.8	7.3	4.5	-0.1	242.6	253.4	253.1
6. Nondurable Goods	1073.9	1093.7	1119.7	1138.5	1152.8	1169.7	1183.5	1204.7	1223.1	1242.6	5.0	7.6	6.1	1046.9	1126.2	1195.3
7. Services	1788.5	1825.3	1862.1	1903.6	1943.0	1982.2	2024.6	2067.6	2113.0	2156.8	8.6	8.9	8.7	1729.6	1883.5	2046.9
8. Pers Cons less Services	1537.9	1555.1	1586.3	1609.7	1621.8	1641.8	1657.8	1676.2	1701.8	1729.3	5.5	6.4	4.8	1498.0	1593.2	1669.4
9. % Change(AR)	6.5	4.5	8.3	6.0	3.0	5.0	4.0	4.5	6.3	6.6						
10. Pvt Domestic Invstment	772.0	815.9	814.8	821.5	833.3	828.8	820.7	807.3	810.8	841.5	7.5	7.2	-0.5	766.5	821.4	816.9
11. Residential Structures	236.6	237.7	231.9	226.8	227.0	227.6	230.6	239.0	249.1	258.4	1.3	0.5	2.5	229.7	230.9	236.6
12. Other Structures	145.0	149.4	150.2	151.1	153.2	154.8	155.5	156.2	157.4	159.3	2.5	5.7	3.3	142.8	151.0	156.0
13. Producer's Durables	355.6	367.0	378.8	389.1	396.8	402.9	407.0	408.9	411.5	413.0	12.2	10.8	6.4	345.6	382.9	407.6
14. Change in Inventories	34.7	61.8	53.9	54.5	56.3	43.5	27.6	3.2	-7.2	10.8	---	---	---	48.4	56.6	16.8
15. Chg in Nonfarm Inv	44.6	43.3	49.7	49.2	57.0	34.6	20.4	2.1	-6.6	3.7	---	---	---	ERR	ERR	12.6
16. Net Exports	-96.1	-90.5	-89.2	-86.1	-89.6	-83.4	-88.5	-93.3	-80.2	-70.8	---	---	---	-94.7	-88.9	-86.4
17. Exports	548.0	570.3	580.6	598.2	612.3	635.4	647.9	667.1	683.6	704.7	21.5	13.6	11.5	519.8	590.4	658.5
18. Imports	644.0	660.8	669.8	684.3	701.9	778.8	736.4	760.4	763.8	775.5	11.5	10.6	11.9	614.4	679.2	759.9
19. Government Purchases	997.5	1010.9	1023.4	1039.2	1051.1	1072.2	1086.2	1103.6	1114.9	1133.5	4.3	6.9	6.1	964.9	1031.2	1094.2
20. Federal Purchases	396.3	394.8	400.4	406.2	407.9	419.7	423.9	430.7	432.1	440.3	-0.4	5.6	6.0	381.0	402.3	426.6
21. Defense	301.9	298.7	303.3	305.6	307.1	311.8	312.4	316.1	315.4	320.7	0.9	1.8	3.4	298.4	303.7	313.9
22. Nondefense	94.3	96.1	97.1	100.6	100.8	107.9	111.5	114.6	116.7	119.6	-4.8	19.4	14.2	82.6	98.6	112.7
23. State and Local	601.2	616.1	623.0	633.0	643.2	652.5	662.3	672.9	682.8	693.2	7.5	7.7	6.2	583.9	628.8	667.6
24. Gross National Product	4999.7	5116.8	5197.4	5287.9	5359.6	5441.6	5500.8	5561.4	5660.3	5790.3	7.4	7.7	5.7	4864.3	5240.4	5541.0
25. Net Change(amount)	90.7	117.1	80.6	90.5	71.7	82.0	59.2	60.6	98.9	130.0	---	---	---	337.6	376.2	300.6
26. % Change(curr$, AR)	7.6	9.7	6.5	7.1	5.5	6.3	4.4	4.5	7.3	9.5	---	---	---	6.8	7.7	5.7
27. Gross Natl Product(82$)	4033.4	4088.2	4103.5	4134.5	4144.7	4153.7	4145.1	4137.4	4161.0	4207.1	3.8	3.0	0.8	3996.0	4117.7	4149.3
28. % Change(1982$, AR)	2.4	5.5	1.5	3.1	1.0	0.9	-0.8	-0.7	2.3	4.5	---	---	---	3.8	3.0	0.8
29. Implicit Price Deflator	124.0	125.2	126.7	127.9	129.3	131.0	132.7	134.4	136.0	137.7	3.4	4.6	4.9	121.7	127.3	133.5
30. % Change(AR)	5.3	3.9	4.8	3.8	4.5	5.4	5.3	5.3	4.9	5.0	---	---	---	3.4	4.6	4.9
31. Final Sales(curr$)	4965.0	5055.0	5143.5	5233.4	5303.3	5398.1	5473.2	5558.2	5667.5	5779.5	7.3	7.6	6.6	4815.9	5183.8	5524.3
32. Net Change from Prev	105.7	90.0	88.5	89.9	69.9	94.8	75.1	85.0	109.3	112.0	---	---	---	---	---	---
33. Final Sales(1982$)	4004.4	4034.5	4056.6	4087.1	4094.7	4118.3	4123.6	4136.2	4167.2	4198.0	3.7	2.9	1.7	3953.6	4068.2	4136.3

Table 2.

U. S. Real Expenditures
for 1988-IV and 1989-I with Forecasts for 1989-II through 1991-I

Georgia State University
College of Business Administration
Economic Forecasting Center
May 1989

	Period (Quarter Year)										Percentage Change			Annual Rate		
	IV 88	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	87/88	88/89	89/90	1988	1989	1990
1. Personal Consumption	2626.2	2634.8	2647.7	2668.3	2674.7	2687.7	2694.9	2704.4	2717.8	2734.3	2.8	2.5	1.7	2592.2	2656.4	2701.2
2. % Change(1982$, AR)	3.5	1.3	2.0	3.1	1.0	2.0	1.1	1.4	2.0	2.5						
3. Durable Goods	416.5	413.1	417.3	418.1	413.9	414.3	414.5	408.8	411.9	415.9	4.8	1.5	-0.8	409.7	415.6	412.4
4. Autos, Trucks & Parts	179.6	173.5	176.8	179.6	176.9	178.0	179.0	175.8	178.4	181.8	4.3	-0.6	0.6	177.7	176.7	177.8
5. Other Durable Goods	236.9	239.6	240.5	238.5	237.0	236.3	235.5	233.0	233.5	234.1	5.1	3.0	-1.8	232.0	238.9	234.6
6. Nondurable Goods	907.4	911.8	910.5	918.2	919.7	924.0	921.8	928.3	929.0	933.2	1.1	1.7	1.2	899.6	915.1	925.8
7. Services	1302.2	1309.9	1319.9	1332.0	1341.1	1349.4	1358.6	1367.3	1376.9	1385.2	3.5	3.3	2.8	1283.0	1325.7	1363.1
8. Pvt Domestic Investment	717.1	751.4	746.6	747.5	752.8	739.4	725.6	707.0	704.2	723.2	6.9	3.8	-4.1	721.8	749.6	719.1
9. Residential Structures	196.6	194.8	188.5	182.6	180.9	179.9	180.4	185.1	190.9	195.9	-1.7	-2.7	-1.4	191.8	186.7	184.1
10. Other Structures	125.5	127.9	127.4	126.8	127.1	127.2	126.6	126.0	125.7	126.0	-0.3	1.8	-0.7	125.1	127.3	126.4
11. Producer's Durables	365.9	374.9	383.8	390.7	394.8	396.9	397.1	394.7	393.8	392.2	13.2	6.5	2.5	362.4	386.1	395.6
12. Change in Inventories	29.1	53.8	46.9	47.4	50.0	35.4	21.5	1.2	-6.2	9.1	----	----	----	42.5	49.5	13.0
13. Chg in Nonfarm Inv	37.6	41.1	44.2	43.6	50.5	29.2	17.3	0.5	-5.7	4.6	----	----	----	40.0	44.9	10.3
14. Net Exports	-105.4	-95.6	-87.3	-83.6	-86.5	-81.6	-83.9	-87.7	-73.8	-64.3	----	----	----	-100.2	-88.3	-81.8
15. Exports	522.1	535.4	538.1	548.8	555.1	568.3	572.4	581.6	589.3	600.8	18.1	7.8	6.2	504.8	544.4	577.9
16. Imports	627.4	631.0	625.4	632.4	641.6	649.9	656.3	669.3	663.1	665.1	8.6	4.6	4.3	605.0	632.6	659.7
17. Government Purchases	795.5	797.7	796.5	802.3	803.7	808.2	808.5	813.7	812.8	813.9	0.2	2.3	1.3	782.3	800.1	810.8
18. Federal Government	335.5	333.2	334.0	337.6	336.6	339.5	339.2	342.3	340.4	339.5	-3.2	2.0	1.5	328.8	335.4	340.4
19. Federal Purchases	210.7	208.3	209.0	212.4	211.2	214.0	213.6	216.5	214.4	213.3	-5.4	2.8	2.1	204.6	210.2	214.6
20. Value Added	124.8	124.9	125.0	125.2	125.4	125.5	125.6	125.8	126.0	126.2	0.5	0.8	0.5	124.2	125.1	125.7
21. State and Local Govt	460.0	464.5	462.5	464.7	467.1	468.7	469.3	471.4	472.4	474.4	2.8	2.5	1.2	453.6	464.7	470.5
22. State & Local Purch.	208.0	211.5	208.9	210.2	212.0	212.9	212.7	213.9	214.3	215.5	4.2	3.7	1.3	203.1	210.6	213.5
23. Value Added	252.0	253.0	253.6	254.5	255.1	255.8	256.6	257.5	258.1	258.9	1.6	1.4	1.2	250.5	254.1	257.0
24. Gross National Product	4033.4	4088.2	4103.5	4134.5	4144.7	4153.7	4145.1	4137.4	4161.0	4207.1	3.8	3.0	0.8	3996.0	4117.7	4149.3
25. % Change(1982$, AR)	2.4	5.5	1.5	3.1	1.0	0.9	-0.8	-0.7	2.3	4.5						
26. Final Sales Demand	4004.3	4034.4	4056.6	4087.1	4094.7	4118.3	4123.6	4136.2	4167.2	4198.0	3.7	2.9	1.7	3953.6	4068.2	4136.3
27. % Change(1982$, AR)	3.5	3.0	2.2	3.0	0.7	2.3	0.5	1.2	3.0	3.0						
28. Gross Domestic Product	4009.6	4066.3	4082.4	4115.3	4124.5	4134.2	4124.8	4118.6	4142.0	4184.9	4.0	3.1	0.8	3975.1	4097.1	4129.9
29. Government Contribution	376.8	377.8	378.6	379.7	380.5	381.3	382.2	383.3	384.1	385.1	1.3	1.2	0.9	374.6	379.2	382.7
30. Private Domestic Product	3632.8	3688.5	3703.8	3735.6	3744.0	3752.9	3742.6	3735.3	3757.9	3799.8	4.3	3.3	0.8	3600.4	3718.0	3747.2
31. % Change(1982$, AR)	2.3	6.3	1.7	3.5	0.9	1.0	-1.1	-0.8	2.4	4.5						

Table 3.

Income Related U. S. Gross National Product Components
for 1988-IV and 1989-I with Forecasts for 1989-II through 1991-I

Georgia State University
College of Business Administration
Economic Forecasting Center
May 1989

	Period (Quarter Year)										Percentage Change			Annual Rate		
	IV 88	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	87/88	88/89	89/90	1988	1989	1990
1. Compensation of Employees	2995.3	3060.3	3112.3	3167.0	3215.8	3280.1	3328.0	3379.1	3437.2	3506.6	8.3	8.1	6.9	2904.7	3138.9	3356.1
2. Wages & Salaries	2516.8	2574.0	2619.4	2666.8	2709.1	2759.2	2800.1	2844.1	2894.2	2951.4	8.4	8.4	6.9	2436.9	2642.3	2824.4
3. Manufacturing Ind	537.1	545.3	551.7	559.2	565.5	572.8	576.2	579.0	583.9	590.2	6.6	6.3	4.1	522.5	555.4	578.0
4. Other Producing Ind	178.3	182.3	184.3	184.1	184.6	186.1	187.9	191.4	194.4	198.8	8.4	6.3	3.3	173.0	183.8	189.9
5. Distributive Industry	598.6	611.4	624.0	636.9	647.9	659.5	670.6	680.9	692.4	705.2	8.9	8.9	7.3	578.7	630.1	675.9
6. Service Industry	757.4	769.0	788.2	809.4	828.7	850.2	868.8	889.8	914.5	938.3	10.8	11.1	10.3	719.1	798.8	880.8
7. Military Compensation	76.2	79.2	79.6	79.8	79.7	82.2	82.4	82.7	82.5	85.4	3.6	4.9	3.6	75.8	79.6	82.5
8. Other Government	379.2	386.7	391.6	397.4	402.7	408.4	414.2	420.3	426.5	433.5	6.8	6.6	5.8	370.3	394.6	417.4
9. Supplements to W & S	478.5	486.3	492.9	500.2	506.7	520.9	527.9	535.0	543.0	555.2	7.6	6.1	7.1	467.8	496.5	531.7
10. Proprietors Income	323.8	357.8	353.7	354.9	359.3	353.7	349.3	346.0	349.9	356.7	3.8	9.8	-1.9	324.5	356.4	349.7
11. Business & Professional	297.7	300.9	300.1	303.2	302.8	303.3	301.8	299.8	301.4	305.3	6.8	4.7	-0.1	288.2	301.8	301.6
12. Farm Proprietors	26.0	56.9	53.6	51.7	56.5	50.4	47.5	46.2	48.5	51.4	-15.6	50.8	-11.9	36.3	54.7	48.2
13. Rental Income	18.1	13.3	11.6	11.9	12.5	12.8	13.2	13.0	13.7	14.5	5.6	-36.3	6.9	19.4	12.3	13.2
14. Net Interest	415.4	435.5	460.3	476.6	486.9	495.6	504.2	511.8	520.9	531.3	10.8	18.7	9.3	391.5	464.8	508.1
15. Corporate Profits(adj)	340.9	326.2	319.7	321.9	314.9	316.7	307.9	299.7	313.5	331.0	4.5	-2.4	-3.5	328.4	320.7	309.5
16. National Income	4093.4	4193.1	4257.6	4332.3	4389.4	4458.9	4502.6	4549.6	4635.2	4740.1	7.8	8.2	5.7	3968.3	4293.1	4536.6
17. Indirect Business Tax	398.7	403.6	410.3	417.1	423.0	429.9	437.0	443.9	451.8	460.6	6.3	6.3	6.6	389.1	413.5	440.7
18. Capital Consumption Adj	-10.9	-2.1	4.4	9.3	13.5	17.4	20.2	22.7	24.9	26.8				-18.1	6.3	21.3
19. Capital Cons. Allowance	527.0	526.6	526.5	527.4	529.0	531.1	533.6	537.3	540.8	545.1	3.3	0.6	1.6	524.5	527.4	535.7
20. Business Transfers	31.8	32.6	33.4	34.2	35.0	35.9	36.7	37.5	38.4	39.3	9.1	10.1	9.8	30.7	33.8	37.1
21. Net Govt Subsidies	-17.4	-19.2	-16.9	-14.9	-16.3	-19.6	-20.6	-20.0	-21.4	-22.3	-12.6	5.2	21.2	-16.0	-16.8	-20.4
22. Statistical Descrepancy	-19.1	-17.8	-17.9	-17.5	-14.0	-12.0	-8.7	-9.6	-9.4	0.7				-12.0	-16.8	-9.9
23. Gross National Product	4999.7	5116.8	5197.4	5287.9	5359.6	5441.6	5500.8	5561.4	5660.3	5790.3	7.4	7.7	5.7	4864.3	5240.4	5541.0

Table 4.

Georgia State University
College of Business Administration
Economic Forecasting Center
May 1989

Derivation of U. S. Personal Income
for 1988-IV and 1989-I with Forecasts for 1989-II through 1991-I

	Period (Quarter Year)										Percentage Change			Annual Rate		
	IV 88	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	87/88	88/89	89/90	1988	1989	1990
1. National Income	4093.4	4193.1	4257.6	4332.3	4389.4	4458.9	4502.6	4549.6	4635.2	4740.1	7.8	8.2	5.7	3968.3	4293.1	4536.6
Less:																
2. Adj. Corporate Profits	340.9	326.2	319.7	321.9	314.9	316.7	307.9	299.7	313.5	331.0	4.5	-2.4	-3.5	328.4	320.7	309.5
3. Social Insurance	200.1	210.2	212.9	215.7	218.0	230.6	232.8	235.3	238.4	248.9	13.4	9.8	9.4	195.1	214.2	234.3
Plus:																
4. Government Transfers	564.5	584.4	594.5	600.9	608.2	629.9	638.3	646.8	655.2	675.7	6.7	7.5	7.6	555.3	597.0	642.6
5. Social Security, etc	305.7	317.6	323.1	326.4	329.0	343.4	347.1	350.8	354.3	367.5	6.7	7.4	7.7	301.8	324.0	348.9
6. Unemployment Benefits	12.7	13.8	14.6	14.3	14.5	14.6	15.1	15.6	15.8	16.1	-8.7	7.1	6.8	13.4	14.3	15.3
7. Veterans Benefits	16.9	17.4	17.5	17.6	17.4	17.9	18.1	18.2	18.0	18.5	2.4	2.6	3.3	17.0	17.5	18.1
8. Employees Retirement	82.4	85.6	87.4	87.9	89.4	92.6	94.5	95.8	97.3	100.6	7.9	7.2	8.5	81.7	87.6	95.1
9. A. F. D. C.	17.5	17.5	17.6	17.8	17.9	18.2	18.4	18.6	18.8	18.9	2.5	3.1	4.5	17.2	17.7	18.5
10. Other Govt Transfers	129.3	132.5	134.3	136.9	140.0	143.2	145.1	147.8	151.0	154.1	9.0	9.4	8.0	124.2	135.9	146.8
11. Business Transfers	31.8	32.6	33.4	34.2	35.0	35.9	36.7	37.5	38.4	39.3	9.1	10.1	9.8	30.7	33.8	37.1
12. Interest Transfers	188.4	197.4	205.6	211.9	215.8	218.9	220.8	221.2	222.2	224.9	6.4	12.6	6.3	184.4	207.7	220.8
13. Personal Dividends	99.4	102.1	104.8	107.5	110.2	112.5	114.7	116.5	118.3	120.3	8.7	10.2	8.8	96.3	106.2	115.5
Equals:																
14. Personal Income	4180.5	4312.4	4398.8	4480.6	4553.6	4625.8	4685.4	4745.7	4822.0	4916.2	7.5	9.2	6.4	4062.1	4436.4	4719.7
Less:																
15. Personal Tax Payments	598.0	616.0	633.5	645.7	658.8	666.0	676.8	687.7	701.5	713.8	3.5	8.2	7.0	590.3	638.5	683.0
Equals:																
16. Personal Disposable Inc	3582.5	3696.4	3765.3	3834.9	3894.8	3959.8	4008.6	4058.0	4120.5	4202.4	8.2	9.4	6.3	3471.8	3797.9	4036.7
Less:																
17. Personal Consumption	3326.4	3380.4	3448.4	3513.3	3564.8	3624.0	3682.4	3743.8	3814.8	3886.1	7.1	7.7	6.9	3227.6	3476.7	3716.3
18. Other Outlays	102.3	104.1	105.3	106.4	107.7	108.6	109.8	111.0	112.3	113.5	7.0	6.0	4.3	99.9	105.9	110.4
Equals:																
19. Personal Savings	153.8	211.9	211.6	215.2	222.3	227.2	216.4	203.2	193.4	202.8	39.9	49.2	-2.4	144.3	215.3	210.1
20. Savings Rate(%, AR)	4.3	5.7	5.6	5.6	5.7	5.7	5.4	5.0	4.7	4.8	29.2	36.1	-8.0	4.2	5.7	5.2

Table 5.

U. S. Federal Government Activity
for 1988-IV and 1989-I with Forecasts for 1989-II through 1991-I

Georgia State University
College of Business Administration
Economic Forecasting Center
May 1989

	Period (Quarter Year)										Percentage Change			Annual Rate		
	IV 88	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	87/88	88/89	89/90	1988	1989	1990
1. Government Receipts	991.5	1023.5	1038.8	1053.0	1064.6	1094.6	1103.5	1114.0	1135.8	1169.5	6.4	7.1	6.4	975.3	1045.0	1112.0
2. Personal Tax & Nontax	415.8	430.0	442.8	450.0	458.7	462.1	469.1	476.2	485.2	492.6	1.9	7.7	6.2	413.4	445.4	473.2
3. Corporate Profits Tax	113.8	117.1	113.4	114.2	111.3	115.2	110.9	108.1	113.6	121.1	4.7	2.3	-1.8	111.5	114.0	112.0
4. Indirect Business Tax	57.9	58.2	58.6	59.0	59.6	60.3	61.5	62.2	63.0	64.4	5.1	3.7	4.9	56.7	58.9	61.8
5. Social Security Contr	404.0	418.2	424.0	429.8	435.0	457.0	462.0	467.5	474.0	491.4	12.2	8.4	9.0	393.7	426.8	465.1
6. Government Expenditures	1149.0	1175.9	1194.9	1213.4	1229.5	1266.4	1280.4	1294.0	1309.0	1334.8	3.9	7.7	7.0	1117.6	1203.4	1287.5
7. Purchases of Goods and Services	396.2	394.8	400.4	406.2	407.9	419.7	423.9	430.7	432.1	440.3	-0.5	5.6	6.0	381.0	402.3	426.6
8. Defense	301.9	298.7	303.3	305.6	307.1	311.8	312.4	316.1	315.4	320.7	0.7	1.8	3.4	298.4	303.7	313.9
9. Durables	86.6	84.5	85.3	85.2	86.4	86.9	85.8	87.2	86.3	86.1	-7.4	1.5	1.4	84.1	85.4	86.6
10. Nondurables	11.3	11.4	11.8	11.6	12.1	12.3	12.5	12.4	12.6	12.7	2.4	6.1	6.2	11.1	11.7	12.5
11. Military Payroll	76.2	79.2	79.6	79.8	79.7	82.2	82.4	82.7	82.5	85.4	3.6	4.9	3.6	75.8	79.6	82.5
12. Civilian Payroll	37.3	39.2	39.5	39.6	39.8	41.6	41.8	42.0	42.2	44.0	3.9	6.5	6.0	37.1	39.5	41.9
13. Other Services	83.5	77.6	80.1	82.3	82.1	82.0	82.8	84.5	84.6	85.3	5.8	-3.3	3.7	83.3	80.5	83.5
14. Structures	7.1	6.8	7.0	7.1	7.0	6.8	7.1	7.3	7.2	7.2	-0.7	-1.8	1.8	7.1	7.0	7.1
15. Nondefense	94.3	96.1	97.1	100.6	100.8	107.9	111.5	114.6	116.7	119.6	-4.5	19.4	14.2	82.6	98.6	112.7
16. Durables	4.6	4.8	4.8	4.9	5.1	5.2	5.2	5.1	5.4	5.5	10.2	7.7	6.6	4.6	4.9	5.2
17. Nondurables	2.0	0.8	0.8	3.7	2.4	6.9	9.7	11.8	12.4	12.3				-7.9	1.9	10.2
18. CCC Inventory Chg	-4.8	-6.5	-6.9	-4.3	-5.6	-1.3	1.4	3.7	3.9	3.5				-15.4	-5.8	1.9
19. Other Nondurables	6.8	7.3	7.7	8.0	8.0	8.2	8.3	8.1	8.5	8.8	15.8	3.7	6.8	7.5	7.8	8.3
20. Compensation	45.5	47.8	48.1	48.3	48.7	50.4	50.9	51.2	51.6	53.7	6.5	7.6	5.8	44.8	48.2	51.0
21. Other Services	34.7	34.9	35.4	35.8	36.5	37.1	37.7	38.4	39.1	39.7	14.9	7.2	6.8	33.3	35.7	38.1
22. Structures	7.6	7.8	8.0	7.9	8.1	8.3	8.0	8.1	8.2	8.4	-6.5	0.6	2.5	7.9	8.0	8.2
23. Transfer Payments	447.5	460.5	468.2	472.4	481.9	497.6	503.8	509.8	520.6	534.3	6.3	7.0	7.9	440.1	470.8	508.0
24. Grants-In-Aid to State and Local Govt	113.0	115.5	113.4	115.6	114.5	116.6	116.9	117.3	117.6	117.9	7.5	2.9	2.0	111.5	114.8	117.1
25. Net Interest Paid	158.9	168.9	178.4	186.0	190.0	193.7	195.6	196.1	196.7	199.0	7.8	17.5	8.1	154.0	180.8	195.5
26. Deficit of Government Enterprises	33.3	36.2	34.5	33.2	35.2	38.8	40.2	40.1	42.0	43.3	-3.6	11.8	15.8	31.1	34.8	40.3
27. Federal Surplus	-157.5	-152.4	-156.1	-160.4	-164.9	-171.8	-176.9	-180.0	-173.2	-165.3	----	----	----	-142.4	-158.5	-175.5
28. State and Local Surplus	52.6	50.0	51.5	56.1	53.7	58.1	57.1	55.7	59.6	65.0	----	----	----	55.2	52.8	57.6
29. Total Government Surplus	-104.9	-102.4	-104.6	-104.3	-111.2	-113.7	-119.8	-124.3	-113.6	-100.3				-87.2	-105.6	-117.9
30. Federal Debt held by Individuals	1852.8	1924.2	1942.6	1997.6	2042.1	2089.2	2108.0	2157.3	2193.5	2238.0	7.9	9.3	8.1	1808.7	1976.6	2137.0

Table 6.

Selected Economic Variables in the U. S. Economy
for 1988-IV and 1989-I with Forecasts for 1989-II through 1991-I

Georgia State University
College of Business Administration
Economic Forecasting Center
May 1989

	Period (Quarter Year)										Percentage Change			Annual Rate		
	IV 88	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	87/88	88/89	89/90	1988	1989	1990
PRIVATE ECONOMY - Annual Rate Changes in:																
1. Private Hourly Wage	5.3	5.7	5.5	5.5	5.6	6.6	5.6	5.8	5.7	5.9	4.7	5.5	5.9	--	--	--
2. Output Per Worker Hour	-1.5	3.5	-0.2	1.4	-0.2	-0.6	-1.6	-1.5	0.7	2.3	0.5	0.5	-0.5	--	--	--
3. Implicit Labor Cost	6.9	2.2	5.7	4.1	5.8	7.2	7.4	7.4	5.0	3.5	4.2	5.0	6.4	--	--	--
4. Private Price Deflator	5.2	3.4	5.1	3.9	4.6	5.1	5.4	5.4	5.0	4.8	3.3	4.5	5.0	--	--	--
PRICES																
5. Consumer Price Index	120.3	121.7	124.0	125.6	127.2	128.5	130.2	131.9	133.6	135.1	4.1	5.4	5.2	118.3	124.6	131.1
6. % Change (AR)	4.2	4.5	7.9	5.3	5.2	4.2	5.4	5.3	5.3	4.6						
7. Producer Price Index (Industrial Commodities)	107.5	110.9	112.0	113.0	114.0	115.6	117.1	118.0	119.0	120.6	3.6	5.8	4.4	106.3	112.5	117.4
8. % Change (AR)	2.4	13.0	4.2	3.6	3.6	5.7	5.3	3.1	3.4	5.5						
CORPORATE ECONOMY																
9. After Tax Profits	174.5	176.4	173.6	174.4	172.5	175.4	171.1	164.6	172.8	183.1	12.8	6.3	-1.9	163.9	174.2	171.0
10. Inventory Profits	-19.2	-33.6	-28.6	-26.2	-25.9	-30.5	-28.3	-25.3	-26.4	-28.7				-23.8	-28.6	-27.6
11. Genuine Profits	194.8	176.1	174.6	175.7	172.4	169.1	166.1	161.8	168.3	175.7	3.5	-5.9	-4.8	185.7	174.7	166.3
12. Dow-Jones Index - Mean Closing	2130.6	2273.9	2311.4	2106.3	2014.3	1883.5	1867.6	1908.2	1984.2	2016.5	-9.5	5.6	-12.2	2060.8	2176.5	1910.9
13. New York Composite Index - Mean Closing	154.79	163.34	165.22	153.54	148.86	141.68	140.25	143.68	149.51	155.26	-7.3	5.2	-8.9	149.9	157.7	143.8
FINANCIAL																
14. Monetary Base	284.5	288.6	292.9	298.1	302.8	307.8	312.5	317.3	322.9	329.1	6.9	6.0	6.6	278.8	295.6	315.1
15. Checkable Deposits	576.8	572.2	567.5	577.1	587.0	599.2	611.7	622.9	637.4	649.6	2.6	0.9	7.3	570.7	576.0	617.8
16. M1	787.4	786.6	785.3	798.9	812.4	828.6	845.0	860.2	879.3	896.1	4.2	2.6	7.2	776.0	795.8	853.3
17. Velocity of M1	6.313	6.471	6.587	6.588	6.565	6.536	6.478	6.435	6.406	6.431	3.3	5.1	-1.4	6.236	6.553	6.464
18. M2	3056.9	3071.6	3101.3	3158.6	3213.2	3270.3	3326.1	3382.8	3449.4	3518.8	5.1	4.2	7.0	3009.4	3136.2	3357.2
19. Velocity of M2	1.626	1.657	1.668	1.666	1.660	1.656	1.646	1.636	1.633	1.638	2.3	3.4	-1.2	1.608	1.663	1.643
20. Federal Funds	8.47	9.44	9.83	10.23	10.29	9.92	9.56	9.24	8.61	8.33	13.7	31.4	-6.2	7.57	9.95	9.33
21. Prime Rate	10.18	10.98	11.45	11.86	12.00	11.73	11.26	10.92	10.42	10.17	13.6	24.2	-4.2	9.32	11.57	11.08
22. 6 Month T-Bills	7.83	8.58	8.75	8.86	8.81	8.62	8.41	8.19	7.83	7.41	14.7	26.6	-5.6	6.91	8.75	8.26
23. Seasoned AAA Corps	9.51	9.68	9.79	9.95	9.83	9.67	9.53	9.36	9.05	9.17	3.6	1.1	-4.2	9.71	9.81	9.40
24. FHA Mortgage Rate	10.39	10.80	10.93	11.06	10.94	10.63	10.38	10.17	10.04	10.15	1.3	5.8	-5.7	10.34	10.93	10.31
ADDITIONAL INDICATORS																
25. Housing Starts	1559	1517	1393	1341	1339	1307	1335	1375	1412	1440	-8.8	-6.5	-2.9	1495	1398	1357
26. Single Family Starts	1138	1076	1002	963	947	928	942	973	996	1011	-5.9	-8.4	-3.7	1088	997	960
27. Unit Auto Sales	10.50	9.77	9.97	10.16	9.82	9.92	9.96	9.53	9.82	10.13	4.2	-6.7	-1.2	10.64	9.93	9.81
28. Civilian Employment	115.843	116.900	117.363	117.979	118.497	119.012	119.322	119.687	120.248	120.850	2.3	2.4	1.6	114.971	117.685	119.567
29. Unemployment Rate	5.3	5.1	5.2	5.0	5.0	5.0	5.2	5.3	5.3	5.4	-11.4	-7.3	2.3	5.5	5.1	5.2
30. Industry Production Indx	139.9	141.0	141.7	143.9	144.6	144.2	142.9	141.2	141.3	142.9	5.6	4.1	-0.3	137.2	142.8	142.4
31. Asset/Outlay Ratio	3.840	3.883	3.849	3.712	3.662	3.581	3.552	3.565	3.599	3.610	-4.1	-1.1	-5.4	3.820	3.777	3.574

Table 7.

U. S. Foreign Trade Accounts
for 1988-IV and 1989-I with Forecasts for 1989-II through 1991-I

Georgia State University
College of Business Administration
Economic Forecasting Center
May 1989

	Period (Quarter Year)										Percentage Change			Annual Rate		
	IV 88	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	87/88	88/89	89/90	1988	1989	1990
MERCHANDISE TRADE (Not Seasonally Adjusted, Annual Rates)																
1. Merchandise Exports	341677	327158	348820	346040	371640	386440	403380	398220	421330	434120	26.3	8.6	15.5	320753	348414	402343
2. Food & Live Animals	28988	27919	27460	30310	30700	30620	30850	31620	32420	32160	37.6	10.2	7.8	26415	29097	31378
3. Beverages & Tobacco	4904	5121	5020	4820	5510	5730	5820	5680	6110	6340	23.0	12.5	14.0	4548	5118	5835
4. Crude Materials	26615	26134	25200	23560	25180	26420	25670	24160	25650	26930	20.8	-0.3	1.8	25099	25019	25475
5. Mineral Fuels	8696	8107	9150	9580	11360	10120	11260	11540	13610	12450	3.4	16.7	21.8	8186	9549	11633
6. Animal & Vegetable Oil	1337	1288	1200	1160	1140	1110	1160	1090	1120	1100	49.6	-17.7	-6.4	1454	1197	1120
7. Chemicals	31946	32531	33400	35410	33620	34760	36150	37420	35610	36350	21.3	4.5	6.7	32300	33740	35985
8. Manufactured Goods	24415	23256	24300	25770	26910	27860	28220	29520	30040	31000	31.5	9.7	15.4	22845	25059	28910
9. Machinery, Trnspt. Eq.	143976	128002	139500	137230	151720	158460	165610	163540	176420	182220	23.7	2.9	19.3	135135	139113	166008
10. Misc. Manufacturing	25799	27573	28300	29500	30340	31850	33630	34820	35610	37000	25.3	18.0	17.5	24514	28928	33978
11. Commodities, n.e.c.	30970	34891	40650	34730	39670	43290	47860	42190	46750	50120	41.5	35.0	20.1	27765	37485	45023
12. Foreign Merchandise	14030	12335	14640	13970	15490	16220	17150	16640	17990	18450	36.6	12.9	20.5	13493	14109	17000
13. Merchandise Imports	462756	443539	465051	473737	492236	503353	517489	529823	534447	537710	8.6	6.2	11.2	441101	468641	521278
14. Food & Live Animals	19790	22174	21750	21360	22160	24430	23270	23050	24270	26310	-3.4	9.7	8.7	19927	21861	23755
15. Beverages & Tobacco	4831	3754	3870	4050	4630	3980	4170	4315	4920	4260	2.7	-1.5	6.6	4139	4076	4346
16. Crude Materials	13557	15193	15900	16400	16500	17320	17950	18560	17120	17050	16.9	19.4	10.9	13396	15998	17738
17. Mineral Fuels	38963	47094	55461	56777	57726	61213	65789	64968	65107	67665	-8.2	32.1	18.4	41088	54265	64269
18. Animal & Vegetable Oil	1069	641	570	610	600	610	640	640	650	635	50.9	-28.7	4.9	849	605	635
19. Chemicals	19980	21257	21850	22270	23110	25220	25160	26120	26950	27110	22.5	11.3	16.9	19875	22122	25863
20. Manufactured Goods	62508	62123	64950	65960	66310	67630	68120	69220	68340	68560	16.6	5.2	5.4	61636	64836	68328
21. Machinery, Trnspt. Eq.	214642	192281	198300	193630	212510	216660	224360	225130	233710	235480	10.4	1.1	12.9	197053	199180	224965
22. Misc. Manufacturing	73534	66153	69200	78450	74110	72230	73650	82260	78260	75930	8.6	2.1	6.4	70465	71978	76600
23. Commodities, n.e.c.	13882	12868	13200	14230	14580	14060	14380	15560	15120	14710	2.1	8.3	7.7	12672	13720	14780
FOREIGN TRANSACTIONS - GNP ACCOUNTS (Seasonally Adjusted, Annual Rates)																
24. Total Exports	548.0	570.3	580.6	598.2	612.3	635.4	647.9	667.1	683.6	704.7	21.5	13.6	11.5	519.8	590.4	658.5
25. Mdse Exports	337.6	350.8	350.8	361.0	371.6	388.4	393.4	408.2	421.3	437.1	26.4	11.5	12.3	321.6	358.6	402.8
26. Factor Income	122.5	128.6	134.3	138.9	142.7	145.7	148.9	151.3	154.1	156.2	16.3	21.7	10.2	111.9	136.1	150.0
27. Other Services	87.9	91.0	95.5	98.3	98.0	101.3	105.6	107.6	108.2	111.4	11.8	10.9	10.4	86.3	95.7	105.7
28. Total Imports	644.0	660.8	669.8	684.3	701.9	718.8	736.4	760.4	763.8	775.5	11.5	10.6	9.7	614.4	679.2	744.9
29. Mdse Imports	469.0	476.1	477.2	483.7	497.2	508.4	522.5	539.8	539.4	547.7	8.8	7.5	9.1	449.7	483.6	527.5
30. Factor Income	93.5	101.7	109.3	114.5	116.1	120.1	122.8	125.3	126.9	128.5	31.9	26.9	12.1	87.0	110.4	123.8
31. Other Services	81.5	83.0	83.3	86.1	88.6	90.3	91.1	95.3	97.5	99.3	8.1	9.8	9.7	77.7	85.3	93.6
32. Net Transfer Payments	17.6	12.8	12.3	11.9	16.4	12.4	12.4	12.1	17.0	12.5	2.8	-3.6	0.9	13.9	13.4	13.5
33. Government Interest	29.6	31.4	33.1	34.8	35.4	36.6	37.2	38.0	38.4	38.9	14.8	21.6	11.5	27.7	33.7	37.6
34. Net Foreign Investment	-143.2	-134.7	-134.6	-132.8	-141.4	-132.4	-138.1	-143.4	-135.6	-122.2	----	----	----	-136.1	-135.9	-137.4
35. Trade Weighted Value of Dollar (3/73 = 100)	93.0	96.0	97.9	95.8	91.7	93.5	89.6	87.2	88.3	90.6	-4.3	2.8	-6.0	92.8	95.4	89.7

Table 8.

Personal Consumption Expenditure Implicit Price Deflators
for 1988-IV and 1989-I with Forecasts for 1989-II through 1991-I

Georgia State University
College of Business Administration
Economic Forecasting Center
May 1989

	Period (Quarter Year)										Percentage Change			Annual Rate		
	IV 88	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	87/88	88/89	89/90	1988	1989	1990
1. Durable Goods	111.4	111.7	111.8	112.7	113.3	114.0	114.4	115.3	116.2	117.0	2.0	2.1	2.3	110.1	112.4	115.0
2. Percent Change(AR)	2.0	1.1	0.4	3.2	2.2	2.3	1.7	3.2	3.1	2.8						
3. Automobiles	118.7	120.0	120.1	121.3	122.4	123.1	123.6	124.7	126.0	127.0	2.2	3.1	2.8	117.4	120.9	124.3
4. Percent Change(AR)	3.7	4.4	0.3	4.2	3.5	2.3	1.6	3.6	4.3	3.2						
5. Furniture	99.6	99.3	98.9	98.8	98.5	98.5	98.5	98.8	98.6	98.7	0.7	-0.0	-0.3	98.9	98.9	98.6
6. Percent Change(AR)	2.0	-0.9	-1.9	-0.3	-1.3	-0.0	-0.0	1.4	-1.0	0.5						
7. Other Durables	119.8	120.9	122.0	123.3	125.1	126.7	128.0	129.7	131.7	133.2	5.0	4.7	5.0	117.4	122.8	129.0
8. Percent Change(AR)	7.2	4.0	3.6	4.3	5.9	5.2	4.4	5.4	6.0	4.9						
9. Nondurables	118.3	119.9	123.0	124.0	125.3	126.6	128.4	129.8	131.7	133.2	3.8	5.8	4.9	116.4	123.1	129.1
10. Percent Change(AR)	3.7	5.5	10.5	3.3	4.4	4.0	5.8	4.4	5.9	4.6						
11. Food	124.2	125.8	127.5	129.1	130.6	132.0	133.5	135.1	136.9	138.5	4.1	5.4	4.8	121.7	128.3	134.4
12. Percent Change(AR)	3.4	5.4	5.3	5.1	4.7	4.4	4.6	4.9	5.4	4.8						
13. Apparel	118.0	117.9	120.6	119.3	121.5	122.2	124.3	123.8	125.8	126.7	4.2	3.5	3.5	115.8	119.8	124.0
14. Percent Change(AR)	11.8	-0.1	9.2	-4.1	7.6	2.3	7.0	-1.7	6.7	2.8						
15. Gasoline and Oil	79.3	79.3	90.5	92.1	90.9	90.7	92.6	94.9	96.5	97.7	0.9	11.5	6.2	79.1	88.2	93.7
16. Percent Change(AR)	-7.9	0.3	69.4	7.3	-5.4	-0.7	8.5	10.5	6.6	5.2						
17. Fuel Oil	73.3	77.5	80.9	79.9	79.5	81.8	83.5	85.1	87.3	89.1	0.4	3.5	6.3	76.8	79.4	84.4
18. Percent Change(AR)	-20.7	24.7	19.1	-5.0	-2.2	12.4	8.4	7.8	10.8	8.8						
19. Other Nondurables	132.8	135.0	137.1	138.8	140.8	142.7	144.6	146.7	148.7	150.6	4.5	5.7	5.6	130.5	137.9	145.7
20. Percent Change(AR)	5.7	6.9	6.3	4.9	6.0	5.4	5.4	5.9	5.6	5.3						
21. Services	137.3	139.3	141.1	142.9	144.9	146.9	149.0	151.2	153.5	155.7	4.9	5.4	5.7	134.8	142.1	150.1
22. Percent Change(AR)	5.3	6.0	5.1	5.3	5.6	5.7	5.9	6.0	6.1	6.0						
23. Housing	139.3	140.6	142.1	143.9	145.7	147.4	149.3	151.2	153.2	155.2	4.8	4.5	5.0	136.9	143.1	150.3
24. Percent Change(AR)	5.0	3.9	4.2	5.2	5.1	4.7	5.3	5.2	5.4	5.3						
25. Electricity and Gas	114.8	115.3	115.5	116.5	117.9	119.0	120.7	122.2	124.4	126.4	0.8	2.8	4.5	113.1	116.3	121.6
26. Percent Change(AR)	7.1	1.8	0.6	3.7	4.9	3.5	5.9	5.3	7.2	6.7						
27. Other Household Opns	129.0	129.9	130.4	131.2	132.4	133.3	134.4	135.3	137.2	138.2	2.0	2.6	3.1	127.6	131.0	135.1
28. Percent Change(AR)	3.0	2.9	1.7	2.5	3.6	2.7	3.6	2.8	5.6	3.1						
29. Transportation	127.6	132.2	134.7	136.1	138.1	141.0	143.5	146.2	148.7	151.1	5.2	8.2	7.1	125.0	135.3	144.8
30. Percent Change(AR)	5.9	15.3	7.6	4.3	6.0	8.6	7.3	8.0	6.9	6.6						
31. Medical Care	147.4	150.0	152.8	155.8	158.8	161.7	164.6	167.7	170.8	173.9	6.6	7.7	7.7	143.3	154.3	166.2
32. Percent Change(AR)	7.2	7.3	7.7	8.1	7.9	7.5	7.4	7.7	7.6	7.5						
33. Other Services	137.2	138.9	140.4	142.0	143.6	145.4	147.3	149.3	151.2	153.2	5.0	4.5	5.0	135.1	141.2	148.3
34. Percent Change(AR)	4.1	5.0	4.5	4.6	4.6	5.1	5.3	5.6	5.2	5.4						

Table 9.

Gross National Product Implicit Price Deflators
for 1988-IV and 1989-I with Forecasts for 1989-II through 1991-I

Georgia State University
College of Business Administration
Economic Forecasting Center
May 1989

	Period (Quarter Year)										Percentage Change			Annual Rate		
	IV 88	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	87/88	88/89	89/90	1988	1989	1990
1. Gross National Product	124.0	125.2	126.7	127.9	129.3	131.0	132.7	134.4	136.0	137.7	3.4	4.6	4.9	121.7	127.3	133.5
2. Percent Change(AR)	5.3	3.9	4.9	3.8	4.5	5.4	5.3	5.2	4.8	5.1						
3. Personal Consumption	126.7	128.3	130.2	131.7	133.3	134.8	136.6	138.4	140.4	142.1	4.2	5.1	5.1	124.5	130.9	137.6
4. Percent Change(AR)	4.9	5.1	6.1	4.7	4.9	4.6	5.4	5.4	5.9	4.9						
5. Consumer Price Index	120.3	121.7	124.0	125.6	127.2	128.5	130.2	131.9	133.6	135.1	4.1	5.4	5.2	118.3	124.6	131.1
6. Percent Change(AR)	4.2	4.5	7.8	5.3	5.2	4.2	5.4	5.3	5.3	4.6						
7. Private Domestic Invest	107.7	108.6	109.1	109.9	110.7	112.1	113.1	114.2	115.1	116.4	0.4	3.2	3.7	106.2	109.6	113.6
8. Percent Change(AR)	5.0	3.4	2.0	2.8	2.9	5.1	3.7	3.9	3.4	4.3						
9. Structures	115.6	116.8	117.9	119.2	120.5	121.7	122.8	124.0	125.2	126.4	2.7	3.9	4.1	114.2	118.6	123.4
10. Percent Change(AR)	4.6	4.2	3.8	4.5	4.4	4.0	3.7	4.0	3.9	3.9						
11. Producer's Durables	97.2	97.9	98.7	99.6	100.5	101.5	102.5	103.6	104.5	105.3	-1.0	4.0	3.9	95.4	99.2	103.0
12. Percent Change(AR)	10.5	2.9	3.3	3.7	3.7	4.0	4.0	4.4	3.5	3.1						
13. Residential Structures	120.4	122.0	123.0	124.2	125.5	126.5	127.8	129.1	130.5	131.9	2.9	3.3	3.9	119.8	123.7	128.5
14. Percent Change(AR)	2.7	5.4	3.3	4.0	4.3	3.2	4.2	4.1	4.4	4.4						
15. Exports	105.0	106.5	107.9	109.0	110.3	111.8	113.2	114.7	116.0	117.3	2.9	5.3	5.1	102.9	108.4	113.9
16. Percent Change(AR)	2.7	5.8	5.4	4.1	4.9	5.6	5.1	5.4	4.6	4.6						
17. Imports	102.6	104.7	107.1	108.2	109.4	110.6	112.2	113.6	115.2	116.6	2.6	5.7	5.2	101.5	107.4	112.9
18. Percent Change(AR)	5.2	8.4	9.5	4.2	4.5	4.5	5.9	5.1	5.8	5.0						
19. Federal	118.1	118.5	119.9	120.3	121.2	123.6	125.0	125.8	126.9	129.7	2.8	3.5	4.5	115.9	120.0	125.3
20. Percent Change(AR)	11.6	1.4	4.8	1.3	3.0	8.2	4.6	2.6	3.5	9.1						
21. Federal Purchases	112.6	109.7	111.6	112.3	113.5	114.7	116.5	117.7	119.3	120.6	1.7	2.5	4.7	109.0	111.8	117.1
22. Percent Change(AR)	22.8	-9.8	6.8	2.7	4.3	4.3	6.3	4.2	5.6	4.3						
23. Federal Value Added	127.4	133.1	133.8	133.9	134.1	138.8	139.4	139.8	139.9	145.1	3.9	5.2	4.3	127.1	133.7	139.5
24. Percent Change(AR)	0.3	19.1	2.1	0.3	0.6	14.8	1.7	1.2	0.3	15.7						
25. State & Local	130.7	132.6	134.7	136.2	138.4	139.2	141.1	142.8	144.5	146.1	4.7	5.2	4.7	128.7	135.5	141.9
26. Percent Change(AR)	3.4	5.9	6.5	4.5	6.6	2.3	5.6	4.9	4.8	4.5						
27. State/Local Purchases	119.0	121.2	123.7	125.0	126.3	127.8	129.9	131.4	132.9	134.3	3.8	5.4	5.2	117.6	124.0	130.5
28. Percent Change(AR)	1.9	7.6	8.3	4.3	4.2	5.0	6.8	4.5	4.8	4.1						
29. State/Local Value Added	140.3	142.2	143.8	145.5	147.2	148.7	150.4	152.2	154.2	156.0	5.5	5.0	4.6	137.7	144.7	151.4
30. Percent Change(AR)	5.0	5.5	4.6	4.8	4.8	4.1	4.7	4.9	5.4	4.8						

Table 10.

Details of Private Consumption in the U. S.
for 1988-IV and 1989-I with Forecasts for 1989-II through 1991-I

Georgia State University
College of Business Administration
Economic Forecasting Center
May 1989

	Period (Quarter Year)										Percentage Change			Annual Rate		
	IV 88	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	87/88	88/89	89/90	1988	1989	1990
Current Dollars																
1. Durable Goods	464.0	461.5	466.6	471.2	469.0	472.1	474.3	471.5	478.7	486.7	6.7	3.5	1.5	451.1	467.1	474.2
2. Autos, Trucks & Parts	213.2	208.2	212.3	217.9	216.5	219.1	221.2	219.2	224.8	230.9	6.2	2.5	3.4	208.6	213.7	221.1
3. Furniture	162.3	167.8	167.3	164.4	162.7	161.8	161.3	159.8	159.9	160.4	7.2	4.1	-2.9	159.0	165.6	160.7
4. Other	88.5	85.5	87.0	88.9	89.8	91.2	91.8	92.5	94.0	95.4	6.6	5.1	5.2	83.6	87.8	92.4
5. Nondurable Goods	1073.9	1093.7	1119.7	1138.5	1152.8	1169.7	1183.5	1204.7	1223.1	1242.6	4.9	7.6	6.1	1046.9	1126.2	1195.3
6. Food	564.9	579.4	588.4	596.4	604.5	613.0	621.2	630.8	640.0	649.7	4.8	7.4	5.8	551.5	592.2	626.3
7. Clothing & Shoes	193.6	193.3	194.0	199.0	201.6	204.7	204.1	207.2	209.6	213.2	4.5	5.7	4.8	186.4	197.0	206.4
8. Gasoline & Oil	79.5	78.3	88.7	90.1	89.5	89.7	91.0	93.4	95.1	96.4	2.4	10.0	6.5	78.8	86.7	92.3
9. Fuel Oil & Coal	17.3	16.5	17.4	17.5	17.8	18.0	18.2	18.8	19.2	19.7	7.3	0.4	7.2	17.2	17.3	18.6
10. Other	218.6	226.2	231.2	235.5	239.4	244.3	249.0	254.5	259.2	263.6	6.5	9.5	8.0	213.0	233.1	251.8
11. Services	1788.5	1825.3	1862.1	1903.6	1943.0	1982.2	2024.6	2067.6	2113.0	2156.8	8.6	8.9	8.7	1729.6	1883.5	2046.9
12. Housing	514.0	521.2	528.9	537.9	547.0	555.7	565.1	574.6	584.6	594.7	7.2	6.4	6.8	501.6	533.8	570.0
13. Utilities	96.7	93.2	94.6	98.6	100.6	101.0	103.3	105.5	109.6	111.9	4.8	3.9	8.4	93.1	96.8	104.9
14. Other	106.0	107.4	108.5	110.1	111.6	113.0	114.8	116.4	118.4	120.0	6.4	5.6	5.7	103.6	109.4	115.7
15. Transportation	122.5	126.8	128.6	132.4	136.0	139.4	142.6	146.1	149.0	152.3	8.0	8.2	10.2	121.1	131.0	144.3
16. Medical Care	424.7	439.3	453.5	466.8	480.4	494.0	508.0	522.4	537.8	552.8	12.0	13.8	12.1	404.2	460.0	515.6
17. Other	524.8	537.4	548.0	557.8	567.4	[illegible].1	590.8	602.6	613.6	625.1	8.1	8.4	7.9	510.0	552.7	596.5
Constant Dollars																
18. Durable Goods	416.5	413.1	417.3	418.1	413.9	414.3	414.5	408.8	411.9	415.9	4.5	1.5	-0.8	409.7	415.6	412.4
19. Autos, Trucks & Parts	179.6	173.5	176.8	179.6	176.9	178.0	179.0	175.8	178.4	181.8	4.0	-0.6	0.6	177.7	176.7	177.8
20. Furniture	163.0	168.9	169.2	166.4	165.2	164.3	163.8	161.7	162.2	162.5	6.5	4.1	-2.6	160.8	167.4	163.0
21. Other	73.9	70.7	71.3	72.1	71.8	72.0	71.7	71.3	71.4	71.6	1.5	0.4	0.2	71.2	71.5	71.6
22. Nondurable Goods	907.4	911.8	910.5	918.2	919.7	924.0	921.8	922.3	929.0	933.2	1.0	1.7	1.2	899.6	915.1	925.8
23. Food	454.8	460.4	461.5	462.0	462.9	464.4	465.3	466.9	467.5	469.1	0.7	1.9	0.9	453.3	461.7	466.0
24. Clothing & Shoes	164.1	163.9	160.9	166.8	165.9	167.5	164.2	167.4	166.6	168.3	0.3	2.1	1.2	161.1	164.4	166.4
25. Gasoline & Oil	100.3	98.7	98.0	97.8	98.5	98.9	98.3	98.4	98.6	98.7	1.5	-1.4	0.3	99.6	98.3	98.6
26. Fuel Oil & Coal	23.6	21.3	21.5	21.9	22.4	22.0	21.8	22.1	22.0	22.1	6.9	-3.0	0.9	22.5	21.8	22.0
27. Other	164.6	167.5	168.6	169.7	170.0	171.2	172.2	173.5	174.3	175.0	1.9	3.6	2.3	163.2	169.0	172.8
28. Services	1302.2	1309.9	1319.9	1332.0	1341.1	1349.4	1358.6	1367.3	1376.9	1385.2	3.5	3.3	2.8	1283.0	1325.7	1363.1
29. Housing	369.0	370.6	372.2	373.8	375.4	377.0	378.5	380.0	381.6	383.2	2.2	1.8	1.7	366.5	373.0	379.3
30. Utilities	84.2	80.8	81.9	84.6	85.3	84.9	85.6	86.3	88.1	88.5	4.0	1.1	3.7	82.3	83.2	86.2
31. Other	82.2	82.7	83.2	83.9	84.3	84.8	85.4	86.0	86.3	86.8	4.2	2.9	2.5	81.2	83.5	85.6
32. Transportation	96.0	95.9	95.5	97.3	98.5	98.9	99.4	99.9	100.2	100.8	5.0	3.3	2.9	93.7	96.8	99.6
33. Medical Care	288.2	292.9	296.8	299.6	302.5	305.5	308.6	311.5	314.9	317.9	5.1	5.7	4.1	282.0	298.0	310.1
34. Other	382.6	387.0	390.3	392.8	395.1	398.3	401.1	403.6	405.8	408.0	2.9	3.7	2.8	377.3	391.3	402.2

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FORECAST OF THE NATION

1989-III—1991-II

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GEORGIA STATE UNIVERSITY
COLLEGE OF BUSINESS ADMINISTRATION

August 1989

Dr. Donald Ratajczak, Director

ECONOMIC FORECASTING CENTER

THE RECESSION WATCH HAS BEEN CANCELLED

Dr. Donald Ratajczak
Director
Economic Forecasting Center

SUMMARY

Annual data revisions indicate that the inventory buildup has been less than meets the eye. With inventory accumulations $15 billion below previously stated levels for 1988 and with increases $25 billion at annual rates below previously reported first-quarter levels this year, evidence of inventory excesses aside from the automobile industry are difficult to uncover. Although sluggish consumer growth will be adding to inventory pressures late this year, inventory imbalances simply are not large enough to generate a recession.

Moreover, reduced commodity inflation during the second half of this year will re-energize purchasing power in the consumer sector. No consumer spending explosion is anticipated, but 2% real growth in consumer spending should appear during the next two years.

Autos are the exception, as sharply rising auto prices will shift purchases into this summer at the expense of next year's models. The result will be auto sales plunging to 10 million in 1989 from 10.6 million in 1988 and an even lower 9.8 million in 1990. Truck sales also are expected to show sluggish performance in contrast to previous periods of weak auto sales.

Because of accounting conventions, the surge in auto prices will not show up in the GNP or CPI price indices. Instead, the price increases will be counted as quality improvements because they are related to significant safety features. Therefore, inflation as measured by the GNP deflator will crest at a 4.4% increase this year and remain in the 4.3% range next year. The CPI is expected to slow from a 5% gain in 1989 to a 4.6% increase in 1990.

Further interest rate declines are anticipated, although long-term government bonds already are consistent with next year's projected inflation. Thus, only modest declines to a 7.5% yield on thirty-year government bonds is anticipated by the middle of 1990. Short-term interest rates still are too high for projected inflationary conditions and should fall significantly. The prime rate is expected to decline to 9% during the forecast period.

Although economic growth is expected to slow from 4.4% in 1988 to 2.9% in 1989 and 1.7% in 1990, unemployment is expected to remain little changed from current levels. This is caused by a significant slowing in the growth of the labor force and by a continuation of poor productivity gains. Because labor markets are expected to remain relatively tight, private wage compensation is expected to drift upward from 4.7% increases in 1988 to gains of 5.4% in 1989 and then 5.8% with the aid of Social Security tax rate increases in 1990.

Strong growth in wage compensation along with moderate increases in economic activity will lead to little growth in corporate profitability. If profits remain flat and interest rates show little further downward movement, the only forces generating increasing equity values will be foreign demand and share repurchases. Those factors should not be enough to sustain current stock market values. Therefore, a several-hundred-point-drop in the Dow Jones average is anticipated over the next 12 months. A rebound in stock values then should develop late in 1990 or early the next year.

Further declines in short-term interest rates should begin to undermine the surprising strength in the dollar. In addition, trade balances will be slow to improve further, although data revisions reveal that trade deficits have improved more than originally expected. Our estimates show the dollar declining about 5% in value in 1990 over 1989 levels. Trade deficits should continue to improve, but significant gains in factor incomes by foreign investors will prevent any material further improvement in the important current account deficits.

Finally, economic activity will slow sufficiently to prevent any further meaningful improvement in government deficits. Indeed, the national income account deficits generated for 1989 are slightly higher than those of the previous year. Reduced revenue gains in 1990 should generate another year of deficits in the $150 billion range.

DATA REVISIONS

On the surface, the annual GNP data revisions that were released in July appeared to provide little excitement. Economic activity was revised upward, especially in 1988. However, no dramatic increases occurred in the level of economic activity or in the rate of capital accumulation. In addition, inflationary pressures were about the same as previously announced.

However, two offsetting factors require a dramatic change in the current assessment of economic conditions. Because of a substantial under-reporting of services sold to foreigners, exports were underestimated by nearly $35 billion in inflation-adjusted terms during the first quarter. This led to a dramatic reduction in the inflation-adjusted deficit from net exports. Moreover, the current account deficit also previously was overstated by $35 billion. As a result, this nation is not becoming a debtor nation as rapidly as previously thought. Nevertheless, current account deficits remain in the $100 billion range.

By itself, such a surge in the foreign sales of services would lead to a dramatic increase in economic activity. Indeed, much of the upward revision in GNP for 1988 was associated with that rapid growth in service exports.

Offsetting the surge in export activity was a substantial moderation in inventory investment. For example, inventories were being accumulated $15 billion more slowly than originally reported in 1988. Fewer inventories and greater sales led to minimal inventory excesses. In the first quarter of 1989, a reported $41 billion increase in non-farm inventories was scaled back to a gain of only $17 billion. Thus, sluggish inventory investment was about enough to offset the surging service exports. Total economic activity and total income showed little change.

However, the dramatic slowing in inventory accumulation means that only auto inventories are excessive at the present time. Obviously, recessionary imbalances are hard to generate if inventory excesses are absent. To be sure, a significant further decline in consumer spending could quickly generate inventory imbalances. However, spending restraint during the first half of 1989 has not generated any serious inventory overhang. Our estimate of inventory surplus as measured from an ideal relationship of inventory to goods production is only $1.5 billion as the second half begins. Excess auto inventories more than account for this overhang, which constitutes less than a day's level of production. Normally, inventory surpluses reach $40 -$50 billion before a recession occurs.

Also, the surge in exported services provides some justification for the rapid growth in service employment during the past year. Some slowing now is occurring in the growth of that service component as the dollar has rallied significantly. Nevertheless, trade deficits should continue to moderate, even in the absence of an economic decline. Also, smaller current account deficits require smaller currency value adjustments in order to eliminate trade deficits. The dollar still is expected to weaken, but the magnitude of decline is now less than previously projected.

With less dollar decline than previously anticipated, inflationary pressures should be slow to rebound, especially in commodities competing in the world markets. On the other hand, the absence of any need for a serious inventory correction probably will sustain higher short-term interest rates than previously anticipated.

OUTLOOK

Dr. Milton Friedman used to say that supply shocks do not generate inflation. Only monetary policy does. In the long run, he probably is correct. However, a tendency for central banks to avoid sharp increases in interest rates caused by supply shocks led to monetary expansions that insured higher inflation rates. If the central bank would not have done so except for the impact of the supply shocks, one can argue whether it was the monetary policy or the supply shock that generated the inflation.

Rather than debate the merits of the above statement, the economic outlook very much depends upon the path taken as a supply shock, which has not been ratified by the Federal Reserve, begins to fade. Any short-run surge in prices from last year's drought and the OPEC decision to restrict oil production should be followed by significant price moderation. Thus, in the absence of monetary policy to alter inflationary trends, above-trend prices should be followed by below-trend prices. Then, a return to that underlying inflationary path will develop.

The surge in prices following the drought and OPEC production restraints has now run its course. Consumer prices, which previously had been increasing slightly more than 4%, increased 6% in the first six months of this year. Prices now should swing to below-trend rates of gain. Of course, slower industrial activity will be necessary to encourage some of those price concessions. That slower activity apparently has been generated by rising interest rates, especially short-term rates, which have discouraged housing activity and restrained inventory investing. Fortunately, inventory restraints reduced the likelihood that production curtailments will become amplified. Only the automobile industry appears to be overweighed by inventories at the present time. A cutback in production in that industry will create some pain but should not generate a recession.

Of course, as the near term inflationary pressures recede, short-term interest rates should come down. That, in turn, should help the housing industry and encourage some inventory holdings. More significantly, the reduction of inflationary pressures should restore purchasing power to consumers. As a result, the sluggish consumer spending patterns that prevailed during the high inflationary first half should give way to more moderate spending activity in the latter part of the year.

Unfortunately, one special event will partially tarnish this advance toward a soft economic landing. Automobile prices are scheduled to rise sharply in the next model year. As these price increases have been widely announced, consumers, and especially automobile fleet purchasers, will probably buy the end of this model year at the expense of next year. As a result, the auto industry is expected to slump late in the year and remain at low levels of activity through much of 1990. Obviously, steel, plastics, and fibers all will be impacted by such sluggish auto activity.

Although automobile prices will be higher, the price indices will not reflect this because of the current procedure of adjusting automobiles for quality changes. As most of the price increase is caused by the introduction of improved safety devices, virtually all of the price increase will be declared a quality adjustment. However, consumers still are expected to shift purchasing between the model years.

Because of the shift in automobile sales, economic activity should grow very slowly early in 1990. However, the automobile industry no longer is sufficiently important to generate a recession on its own. By that time, lower interest rates will have stimulated housing activity. In addition, a reverse in the dollar's fortunes should begin generating improving export activity again. Moreover, reduced inflation outside the automobile industry will generate enough consumer purchasing to maintain steady growth in non-auto sales. Thus, the economy is expected to continue moving grudgingly forward through 1990 and well into 1991.

Autos are not the only source of weakening activity as the forecast period progresses. A surge in purchases of information systems should subside in 1990. This will sharply slow spending on producers' durables. In addition, a shakeout in the trucking industry probably will slow investment activity there. As a result, strong gains previously generated by capital spending gradually will subside.

Another source of potential weakness is activity at the state and local government levels. Despite significant pension surpluses, operating deficits for state and local entities apparently increased to an annual rate of $30 billion during the second quarter. In order to remove these budgetary burdens, increased tax rates and moderating spending programs are expected at that level of government. Also, the recently experienced slowing of defense expenditures is expected to persist. Although strategic programs remain largely intact, Congress has allowed a natural attrition in the resident military population as military wages become less competitive with civilian activities. Further moderate declines in troop levels are anticipated through the forecast period. This moderation in defense spending should be coupled with moderate tax increases in an attempt to whittle down government deficits.

Unfortunately, relatively sluggish growth in the economy will prevent revenues from growing as rapidly as projected. For that reason, government deficits will not recede. However, the deficit at full employment will decline. This means that budgetary policy will not be as stimulative as in the past.

Normally, a combination of restrictive monetary policy and increasingly restrictive budgetary policy would lead to an economic downturn. This would be especially true at this phase of the cycle. However, the degree of budgetary restraint is not large. In the absence of significant economic imbalances, such moderate austerity is not expected to lead to an economic decline.

The prime rate is expected to fall eventually to 9% while long-term government bonds should trend downward to a yield of 7.5%. However, most of the decline in long-term interest rates already has occurred. With gradual economic expansion, wage pressures will remain significant, although slowing commodity inflation may prevent any significant acceleration. The return to 5% inflation, which is now seen by the beginning of 1991 can be prevented without a recession if productivity gains could improve. Unfortunately, recent experience shows that productivity increases remain elusive in the distributive and service sectors. No substantial change from that poor productivity performance is anticipated during the forecast period.

Unfortunately, investment opportunities in this "soft landing" are difficult to uncover. If the dollar weakens, foreign securities may perform well. However, slowing is also anticipated in those foreign economies. Yields on short-term instruments are expected to continue declining until annual CD rates fall to only a 7% yield. Thus, money market funds do not appear to be acceptable alternatives. Some gains could be anticipated in long-term bonds, but the degree of capital gains projected are only about 5%. Thus, total returns, while satisfactory at 13%, certainly are not sufficient to justify the risk of miscalling interest rates for many investors. Because of continuing wage pressures and poor productivity performance, little growth is expected in corporate profitability over the next two years.

While this appears to be in sharp contrast with the past two years, when corporate profitability appeared to increase nearly 50%, virtually all of those gains were the result of inventory profits, assets sales, and stock buybacks, which improve earnings per share. Stock buybacks are expected to continue, but inventory profits should become more elusive. Also, interest rates were declining over the past two years. Although further declines are anticipated in long-term interest rates, the degree of decline is quite small. Current stock market values almost certainly fully discount these conditions. For that reason, expected returns on equities are not high. Indeed, a 300- to 400-point correction in the Dow Jones should be anticipated in the next 12 months.

Investors probably will be surprised to learn that a soft landing really does not resolve too many economic issues. Productivity remains stagnant. Labor markets remain relatively tight. Wage pressures will persist, although they are not expected to intensify. Profitability will remain relatively elusive. The dollar may again fall, leading to reduced foreign purchases of American assets. Even government deficits appear to be in a holding pattern.

Of course, the Federal Reserve might choose to use the period of production weakness late in 1989 to further reduce inflationary pressures. That would be a better-than-normal time to begin pursuit of a zero inflation program. However, economic activity would show minimal growth. Short-term interest rates then would remain higher than currently projected for a longer period of time. Some further easing of labor market pressures would develop with some moderation in hourly wage gains. Such a policy prescription is not out of the question and could even be defended. It is not assumed here. Excluding such Federal Reserve action, the prospects of a recession have sharply receded. On the other hand, the economic outlook becomes very dull.

ASSUMPTIONS

The Federal Reserve is expected to reverse course from its especially restrictive position earlier this year to a more accommodative stance. The floodgates are not expected to be opened as available reserves are expected to grow only 5.7% next year. However, this would be an increase from the sluggish 1.4% advance this year. Such a monetary policy would preserve underlying inflationary pressures and would prevent a recession from developing. The monetary conditions outlined by this assumption are contained in table 6.

Of course, the Federal Reserve could follow an alternative policy of pursuing zero inflation. This would require more restrictive growth in available reserves and a continuation of sluggish growth in the monetary aggregates. Initially, such a program would lead to higher interest rates than currently projected. However, the economy, after shuddering to a slight decline early in 1990, would then respond with vigorous growth from a lower interest rate base and from lower rates of inflation than currently anticipated. Such a policy has some merit, but it will risk potential recession early in a congressional election year. For those reasons, it is not assumed to be the policy that will be pursued.

No substantial budgetary initiatives currently are anticipated. The administration and Congress are failing to make the strong strategic cutbacks that would lead to substantial budgetary savings in the next few years. Military payrolls are growing slowly as vacancies in divisions are not being filled. Indeed, the resident armed forces has declined by 75,000 in the past 18 months. Another 30,000 decline is anticipated during the forecast period. More substantial defense cuts are possible, but not anticipated. No substantial tax changes are expected, although moderate increases are expected in indirect business taxes over the next two years. Of course, the Social Security tax increase already scheduled for 1990 is expected to take place. Many of the budgetary assumptions are contained in table 5.

Other forecasted assumptions are as follows:

a. Barrels of oil imports are expected to increase by 5.1% in 1989 and another 1.7% in 1990. Oil prices are expected to trend higher, averaging $17.23 in 1989 and nearly $20 in 1990. $22 oil is anticipated in the latter part of 1991. No change in excise taxes was assumed for energy materials.

b. No changes are expected in the cost of living adjustments for government programs. Adjustments of 4.5% were used for the next two fiscal years. Also, government wages were expected to grow by 4.5% in each of the next two years.

c. The wage base for Social Security was assumed to be $51,300 in 1990 and $53,000 in 1991. No change in the tax treatment of government benefits was assumed in the forecast period.

d. Minimum wage legislation, including a six-month training wage and raising the minimum to $4.25 over three years, was assumed with legislation to become effective in 1990. Also, legislated benefits for health and child care were assumed to raise wage costs by 0.3% in 1990 and an additional 0.3% in 1991.

e. World trade is expected to grow 5% in 1990 and 3% in 1991.

f. The coal miners disruptions and the problems with Eastern Airlines were expected to be resolved by the fall. No other significant work stoppages were assumed during the forecast period.

CONCLUSION

No substantial economic imbalances currently exist. Inventories are almost at desired levels relative to current sales. Only a minor auto inventory problem persists at the present time. Consumers have significantly increased their savings and are now in a position to support economic expansion. Although the glut of office buildings persists, current construction is consistent with current leasing activity. Housing activity has already adjusted downward and is poised to show a modest increase. Although the dollar's strength has sapped some export growth, American goods remain competitive in the world economy. Thus, moderate economic expansion now appears to be likely over the next two years.

To be sure, some slowing is expected. Sharp increases in automobile prices will cause some shifting of purchasing into the 1989 model year at the expense of 1990 sales. Also, the consumer remains uncertain about economic conditions and is only grudgingly committing to big-ticket items. While lower interest rates will generate increasing housing, slower growth in household formations and reduced employment gains will limit the magnitude of a housing rebound. Moreover, the government sector is expected to remain slightly restrained in its spending programs. State and local governments are running large deficits and cannot provide significant economic support. The federal budget is continuing to struggle with large deficits and will gradually reduce economic support, especially in the defense areas.

On balance, the soft landing that everyone has been talking about appears to be achievable. However, such results will preserve inflation in a 4% channel. That insures that interest rates on long-term government bonds cannot fall much below 8%. While short-term interest rates clearly are too high for such an interest rate environment, they will only fall by another 1.5 - 2 percentage points. Corporate profits will only move grudgingly forward while equity values will have difficulty sustaining current levels, let alone move to new highs.

Nevertheless, continued employment gains, continued low unemployment rates, and some moderation of interest rate pressures appears to be in store over the next two years. Although the outlook is not terribly exciting, it provides enough economic stability to allow many sick industries to gradually mend their wounds. For that reason, the soft landing forecast may be the most desirable one.

Table 1.

U. S. Expenditures in Current Dollars
for 1989-I and 1989-II with Forecasts for 1989-III through 1991-II

Georgia State University
College of Business Administration
Economic Forecasting Center
August 1989

	Period (Quarter Year)										Percentage Change			Annual Rate		
	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	87/88	88/89	89/90	1988	1989	1990
1. Personal Consumption	3381.4	3437.9	3483.7	3533.0	3591.2	3653.6	3704.2	3775.7	3842.2	3910.8	7.4	6.9	6.4	3235.1	3459.0	3681.2
2. % Change(AR)	7.1	6.9	5.4	5.8	6.8	7.1	5.7	7.9	7.2	7.3						
3. Durable Goods	466.4	470.3	470.5	469.4	473.0	479.7	476.5	486.6	494.6	500.3	8.1	3.1	2.1	455.2	469.2	479.0
4. Autos, Trucks & Parts	211.7	213.3	213.2	210.6	213.3	218.8	215.4	222.1	228.4	230.6	8.2	0.3	2.5	211.6	212.2	217.4
5. Other Durable Goods	254.7	257.0	257.3	258.8	259.7	260.9	261.1	264.5	266.2	269.7	8.0	5.5	1.8	243.6	257.0	261.6
6. Nondurable Goods	1098.3	1116.6	1128.6	1141.6	1158.6	1175.7	1191.7	1208.7	1228.7	1248.4	5.4	6.6	5.6	1052.3	1121.3	1183.7
7. Services	1816.7	1851.0	1884.6	1922.0	1959.6	1998.2	2036.0	2080.4	2118.9	2162.1	8.5	8.2	8.0	1727.6	1868.6	2018.6
8. Pers Cons less Services	1564.7	1586.9	1599.1	1611.0	1631.6	1655.4	1668.2	1695.3	1723.3	1748.7	6.2	5.5	4.5	1507.5	1590.4	1662.6
9. % Change(AR)	5.0	5.8	3.1	3.0	5.2	6.0	3.1	6.7	6.8	6.0						
10. Pvt Domestic Invstment	769.6	777.9	788.9	808.9	803.6	809.1	806.7	827.6	838.3	854.6	7.2	4.8	3.2	750.3	786.3	811.8
11. Residential Structures	238.8	234.0	234.3	243.4	249.2	254.9	259.7	263.0	270.5	278.5	2.7	2.2	8.0	232.5	237.6	256.7
12. Other Structures	144.7	142.6	145.9	147.0	148.2	149.4	151.1	153.0	155.4	157.8	4.9	3.3	3.7	140.4	145.1	150.4
13. Producer's Durables	358.5	368.9	372.4	372.4	371.7	378.5	383.4	385.1	390.8	390.9	11.7	6.1	3.2	346.9	368.1	379.7
14. Change in Inventories	27.7	32.4	36.3	46.1	34.5	26.3	12.5	26.5	21.6	27.4				30.7	35.6	25.0
15. Chg in Nonfarm Inv	19.1	25.3	33.8	42.0	27.6	24.1	10.1	23.0	15.4	24.5				34.2	30.1	21.2
16. Net Exports	-54.0	-52.4	-47.4	-45.4	-45.2	-44.5	-35.8	-38.4	-39.0	-37.1				-73.7	-49.8	-41.0
17. Exports	605.6	625.2	635.3	652.5	666.3	679.9	694.2	707.7	725.3	741.3	22.1	15.0	9.1	547.7	629.7	687.0
18. Imports	659.6	677.5	682.7	697.9	711.5	724.4	730.0	746.1	764.3	778.4	10.7	9.4	7.1	621.3	679.4	728.0
19. Government Purchases	1016.0	1031.4	1048.2	1070.8	1078.9	1093.3	1107.1	1132.2	1144.9	1155.2	4.6	7.5	5.9	969.0	1041.6	1102.9
20. Federal Purchases	399.0	403.9	409.7	422.3	419.5	423.3	426.3	440.7	442.4	441.5	-0.1	7.2	4.6	381.3	408.7	427.5
21. Defense	298.7	302.4	304.0	306.3	311.4	312.8	314.4	316.6	322.0	324.2	1.1	1.6	3.6	298.0	302.9	313.8
22. Nondefense	100.4	101.5	105.7	116.0	108.1	110.5	111.9	124.1	120.4	117.3	-4.1	27.2	7.3	83.3	105.9	113.7
23. State and Local	617.0	627.5	638.5	648.5	659.4	670.0	680.8	691.5	702.5	713.7	7.9	7.7	6.7	587.6	632.9	675.4
24. Gross National Product	5113.1	5194.9	5273.4	5367.3	5428.5	5511.5	5582.2	5697.1	5786.4	5883.5	7.9	7.3	6.1	4880.6	5237.2	5554.8
25. Net Change(amount)	95.8	81.8	78.5	93.9	61.2	83.0	70.7	114.9	89.3	97.1				356.3	356.6	317.6
26. % Change(curr$, AR)	7.9	6.6	6.2	7.3	4.6	6.3	5.2	8.5	6.4	6.9				6.8	7.3	6.1
27. Gross Natl Product(82$)	4106.8	4123.9	4150.1	4176.6	4181.9	4202.6	4214.0	4245.2	4261.8	4287.5	4.4	2.9	1.7	4024.4	4139.4	4210.9
28. % Change(1982$, AR)	3.7	1.7	2.6	2.6	0.5	2.0	1.1	3.0	1.6	2.4				4.4	2.9	1.7
29. Implicit Price Deflator	124.5	126.0	127.1	128.5	129.8	131.1	132.5	134.2	135.8	137.2	3.3	4.4	4.2	121.3	126.5	131.9
30. % Change(AR)	4.0	4.9	3.4	4.5	4.1	4.2	4.1	5.2	4.8	4.3				3.3	4.4	4.2
31. Final Sales(curr$)	5085.4	5162.4	5237.0	5321.2	5394.0	5485.2	5569.7	5670.6	5764.8	5856.1	7.9	7.2	6.3	4850.0	5201.5	5529.9
32. Net Change from Prev	86.7	77.0	74.6	84.2	72.8	91.2	84.5	100.9	94.2	91.3						
33. Final Sales(1982$)	4082.3	4101.9	4128.6	4145.2	4159.9	4188.2	4209.8	4228.1	4250.4	4270.5	4.3	3.0	2.0	3996.5	4114.5	4196.5

Table 2.

U. S. Real Expenditures
for 1989-I and 1989-II with Forecasts for 1989-III through 1991-II

Georgia State University
College of Business Administration
Economic Forecasting Center
August 1989

	Period (Quarter Year)										Percentage Change			Annual Rate		
	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	87/88	88/89	89/90	1988	1989	1990
1. Personal Consumption	2641.0	2648.2	2663.9	2672.3	2687.0	2702.4	2710.6	2726.7	2743.7	2757.4	3.4	2.2	1.9	2598.4	2656.4	2706.7
2. % Change(1982$, AR)	2.0	1.1	2.4	1.3	2.2	2.3	1.2	2.4	2.5	2.0						
3. Durable Goods	419.3	423.8	422.0	418.3	419.9	423.3	418.0	423.2	427.6	429.1	6.1	1.8	0.1	413.6	420.9	421.1
4. Autos, Trucks & Parts	176.1	177.2	176.4	172.3	173.7	177.3	173.2	176.8	180.4	180.3	6.1	-2.1	-0.1	179.2	175.5	175.3
5. Other Durable Goods	243.2	246.6	245.6	246.0	246.2	246.0	244.8	246.4	247.2	248.8	1.1	4.7	0.2	234.4	245.4	245.9
6. Nondurable Goods	915.0	905.8	912.5	915.3	919.5	921.4	925.7	928.4	932.7	936.3	1.6	0.8	1.3	904.5	912.2	923.8
7. Services	1306.7	1318.5	1329.4	1338.7	1347.6	1357.7	1366.9	1375.1	1383.4	1392.0	3.8	3.4	2.9	1280.2	1323.3	1361.8
8. Pvt Domestic Investment	721.1	720.7	721.8	731.9	725.9	725.8	717.7	726.5	731.3	740.3	6.2	1.1	0.0	706.8	723.9	724.0
9. Residential Structures	195.6	188.6	186.4	192.3	194.9	197.0	198.6	198.7	201.9	205.6	-0.3	-1.8	3.4	194.1	190.7	197.3
10. Other Structures	121.1	118.0	119.4	119.0	118.6	118.1	118.0	118.1	118.4	118.8	-0.1	-2.3	-1.0	122.2	119.4	118.2
11. Producer's Durables	379.9	392.2	394.5	389.2	390.4	396.3	396.9	392.6	399.6	398.9	11.5	4.7	1.3	371.6	389.0	394.1
12. Change in Inventories	24.5	22.0	21.5	31.4	22.0	14.4	4.2	17.1	11.4	17.0				27.9	24.9	14.4
13. Chg in Nonfarm Inv	16.9	19.6	19.8	28.7	17.1	12.8	2.6	14.5	7.3	15.1				30.7	21.3	11.8
14. Net Exports	-55.0	-52.6	-50.1	-47.5	-45.8	-44.7	-36.4	-37.2	-36.3	-33.6				-74.9	-51.3	-41.0
15. Exports	569.7	585.1	591.5	604.1	612.4	618.1	624.8	631.3	640.7	648.0	17.6	10.8	5.8	530.1	587.6	621.7
16. Imports	624.6	637.7	641.6	651.6	658.2	662.8	661.2	668.5	677.0	681.6	6.8	5.6	3.7	605.0	638.9	662.7
17. Government Purchases	799.7	807.6	814.5	819.9	814.8	819.1	822.1	829.2	823.1	823.4	0.4	3.2	1.3	785.1	810.4	821.3
18. Federal Government	335.9	341.3	345.2	348.9	341.6	343.8	344.9	350.4	342.4	340.6	-3.2	4.2	0.7	328.9	342.7	345.2
19. Federal Purchases	209.1	214.8	218.6	222.1	214.5	216.6	217.5	222.7	214.4	212.5	-0.5	6.2	0.8	203.6	216.2	217.8
20. Value Added	126.4	126.5	126.6	126.8	127.1	127.2	127.4	127.7	128.0	128.1	1.3	1.1	0.6	125.2	126.6	127.4
21. State and Local Govt	464.2	466.3	469.3	471.0	473.2	475.3	477.2	478.8	480.7	482.8	3.2	2.5	1.8	456.3	467.7	476.1
22. State & Local Purch.	210.5	211.6	213.6	214.1	215.5	216.6	217.7	218.1	219.1	220.2	1.1	3.5	2.1	205.4	212.5	217.0
23. Value Added	253.7	254.7	255.7	256.9	257.7	258.7	259.5	260.7	261.6	262.6	2.0	1.7	1.5	250.9	255.3	259.2
24. Gross National Product	4106.8	4123.9	4150.1	4176.6	4181.9	4202.6	4214.0	4245.2	4261.8	4287.5	4.4	2.9	1.7	4024.4	4139.4	4210.9
25. % Change(1982$, AR)	3.7	1.7	2.6	2.6	0.5	2.0	1.1	3.0	1.6	2.4						
26. Final Sales Demand	4082.3	4101.9	4128.6	4145.2	4159.9	4188.2	4209.8	4228.1	4250.4	4270.5	4.3	3.0	2.0	3996.5	4114.5	4196.5
27. % Change(1982$, AR)	3.1	1.9	2.6	1.6	1.4	2.7	2.1	1.8	2.1	1.9						
28. Gross Domestic Product	4078.5	4095.1	4120.5	4148.0	4152.8	4173.6	4184.7	4215.6	4233.4	4259.4	0.5	2.9	1.7	3996.3	4110.5	4181.7
29. Government Contribution	380.1	381.2	382.3	383.7	384.8	385.9	386.9	388.4	389.6	390.7	1.8	1.5	1.2	376.1	381.8	386.5
30. Private Domestic Product	3698.4	3713.9	3738.2	3764.3	3768.0	3787.7	3797.8	3827.2	3843.8	3868.7	0.5	3.0	1.8	3620.2	3728.7	3795.2
31. % Change(1982$, AR)	4.0	1 7	2.6	2.8	0.4	2.1	1.1	3.1	1.7	2.6						

Table 3.

Income Related U. S. Gross National Product Components
for 1989-I and 1989-II with Forecasts for 1989-III through 1991-II

Georgia State University
College of Business Administration
Economic Forecasting Center
August 1989

	Period (Quarter Year)										Percentage Change			Annual Rate		
	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	87/88	88/89	89/90	1988	1989	1990
1. Compensation of Employees	3061.7	3115.7	3168.3	3223.5	3287.4	3344.4	3397.2	3459.8	3533.3	3599.1	8.1	8.1	7.3	2907.7	3142.3	3372.2
2. Wages & Salaries	2560.7	2606.6	2650.7	2697.6	2745.1	2793.5	2837.5	2890.9	2948.6	3004.3	8.0	8.2	7.1	2429.0	2628.9	2816.8
3. Manufacturing Ind	546.3	549.5	555.3	560.5	565.6	571.6	576.1	583.7	592.1	599.2	6.9	5.5	3.9	524.0	552.9	574.3
4. Other Producing Ind	180.3	183.6	185.7	189.5	193.1	196.1	199.1	202.2	206.6	211.3	8.0	7.2	7.0	172.4	184.8	197.6
5. Distributive Industry	598.8	610.2	621.3	630.1	640.1	649.7	658.4	669.8	681.1	692.3	7.5	7.6	6.4	571.9	615.1	654.5
6. Service Industry	768.4	789.7	809.2	831.5	851.3	874.2	895.4	919.5	942.2	967.5	10.2	11.9	10.7	714.4	799.7	885.1
7. Military Compensation	79.1	79.0	78.9	78.9	81.7	81.9	82.2	82.5	86.3	86.8	3.8	3.8	3.9	76.1	79.0	82.1
8. Other Government	387.8	394.5	400.3	407.1	413.3	420.0	426.3	433.2	440.3	447.2	7.1	7.3	6.5	370.5	397.4	423.2
9. Supplements to W & S	501.0	509.2	517.6	525.9	542.3	550.9	559.7	568.9	584.7	594.8	8.6	7.3	8.2	478.6	513.4	555.5
10. Proprietors,Income	359.3	355.1	348.3	349.7	349.9	350.6	345.6	352.5	356.9	358.2	5.2	7.7	-1.0	327.8	353.1	349.7
11. Business & Professional	300.3	302.6	303.1	304.8	303.6	304.3	304.1	307.2	308.0	309.1	6.6	5.1	0.7	288.0	302.7	304.8
12. Farm Proprietors	59.0	52.6	45.2	44.9	46.3	46.3	41.5	45.3	48.9	49.1	-4.4	26.8	-11.1	39.8	50.4	44.9
13. Rental Income	11.8	8.7	7.3	8.1	7.4	8.1	7.2	8.0	7.6	8.5	16.8	-42.7	-14.5	15.7	9.0	7.7
14. Net Interest	436.1	458.0	469.4	480.3	488.8	496.3	504.1	514.2	524.3	534.9	11.7	17.3	8.7	392.9	461.0	500.9
15. Corporate Profits(adj)	316.3	307.1	304.8	312.7	297.6	304.2	295.2	308.8	315.5	317.8	10.0	-5.6	-2.8	328.6	310.2	301.5
16. National Income	4185.2	4244.6	4298.1	4374.3	4431.1	4503.6	4549.3	4643.3	4737.6	4818.5	8.4	7.6	6.0	3972.5	4275.6	4531.8
17. Indirect Business Tax	407.7	413.3	419.0	424.9	431.8	439.6	445.8	453.8	462.5	470.0	7.0	5.8	6.4	393.5	416.2	442.8
18. Capital Consumption Adj	0.3	8.0	13.5	16.8	20.8	25.0	28.3	31.6	35.4	37.4				-12.8	9.7	26.4
19. Capital Cons. Allowance	532.7	533.6	535.3	539.6	544.3	548.6	552.4	556.9	560.1	564.8	3.8	1.7	2.8	526.4	535.3	550.6
20. Business Transfers	30.8	31.5	32.2	32.9	33.7	34.4	35.1	35.9	36.6	37.4	8.8	9.6	9.2	29.1	31.9	34.8
21. Net Govt Subsidies	-19.5	-15.3	-13.0	-18.7	-15.8	-15.2	-13.4	-21.2	-18.8	-18.0	4.8	-9.9	-1.4	-18.5	-16.6	-16.4
22. Statistical Descrepancy	-19.7	-20.8	-11.7	-2.5	-17.4	-24.5	-15.3	-3.2	-27.0	-26.6				-8.0	-13.7	-15.1
23. Gross National Product	5113.1	5194.9	5273.4	5367.3	5428.5	5511.5	5582.2	5697.1	5786.4	5883.5	7.9	7.3	6.1	4880.6	5237.2	5554.8

Table 4.

Derivation of U. S. Personal Income
for 1989-I and 1989-II with Forecasts for 1989-III through 1991-II

Georgia State University
College of Business Administration
Economic Forecasting Center
August 1989

	Period (Quarter Year)										Percentage Change			Annual Rate		
	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	87/88	88/89	89/90	1988	1989	1990
1. National Income	4185.2	4244.6	4298.1	4374.3	4431.1	4503.6	4549.3	4643.3	4737.6	4818.5	8.4	7.6	6.0	3972.5	4275.6	4531.8
Less:																
2. Adj. Corporate Profits	316.3	307.1	304.8	312.7	297.6	304.2	295.2	308.8	315.5	317.8	10.0	-5.6	-2.8	328.6	310.2	301.5
3. Social Insurance	210.0	212.9	215.4	218.4	228.6	231.8	234.5	238.1	246.3	249.8	12.7	9.9	8.9	194.9	214.2	233.3
Plus:																
4. Government Transfers	585.6	594.7	601.7	608.4	630.6	638.7	646.3	654.5	675.1	682.8	6.6	7.5	7.5	555.7	597.6	642.5
5. Social Security, etc	316.9	322.5	325.9	329.3	342.8	346.9	350.6	354.7	366.1	370.3	6.2	7.7	7.8	300.5	323.7	348.8
6. Unemployment Benefits	13.5	13.9	14.2	14.3	14.5	14.7	15.0	15.3	15.3	15.2	-10.3	7.5	6.4	13.0	14.0	14.9
7. Veterans Benefits	17.6	17.5	17.6	17.5	18.1	18.0	18.1	18.1	18.7	18.7	2.1	3.5	3.0	17.0	17.6	18.1
8. Employees Retirement	86.9	87.9	88.3	89.1	92.4	94.0	94.8	96.0	99.8	101.2	8.3	6.4	7.1	82.7	88.1	94.3
9. A. F. D. C.	17.6	17.8	18.0	18.2	18.5	18.6	18.8	19.0	19.3	19.5	3.1	3.9	4.6	17.2	17.9	18.7
10. Other Govt Transfers	133.1	135.0	137.7	140.0	144.3	146.5	149.0	151.4	155.9	157.9	0.0	8.9	8.3	125.3	136.5	147.8
11. Business Transfers	30.8	31.5	32.2	32.9	33.7	34.4	35.1	35.9	36.6	37.4	8.8	9.6	9.2	29.1	31.9	34.8
12. Interest Transfers	192.9	197.3	200.3	199.1	189.4	200.4	200.3	200.3	202.0	204.6	4.0	10.7	0.1	178.3	197.4	197.6
13. Personal Dividends	109.4	111.4	112.9	114.1	115.2	116.4	117.5	118.6	119.8	121.1	11.0	9.6	4.4	102.2	112.0	116.9
Equals:																
14. Personal Income	4317.8	4396.2	4458.0	4527.2	4601.8	4671.9	4729.5	4812.3	4905.3	4988.0	7.6	8.9	6.3	4064.5	4424.8	4703.9
Less:																
15. Personal Tax Payments	628.3	651.6	644.8	655.8	670.2	689.2	684.5	698.0	716.6	737.6	2.6	10.0	6.3	586.7	645.1	685.5
Equals:																
16. Personal Disposable Inc	3689.5	3744.5	3813.2	3871.4	3931.6	3982.7	4045.0	4114.3	4188.7	4250.4	8.5	8.7	6.3	3477.9	3779.7	4018.4
Less:																
17. Personal Consumption	3381.4	3437.9	3483.7	3533.0	3591.2	3653.6	3704.2	3775.7	3842.2	3910.8	7.4	6.9	6.4	3235.1	3459.0	3681.2
18. Other Outlays	102.3	103.0	104.4	105.7	107.2	107.8	109.1	110.4	112.0	112.8	-2.8	6.0	4.6	98.0	103.9	108.6
Equals:																
19. Personal Savings	205.7	203.7	225.1	232.7	233.2	221.3	231.7	228.2	234.5	226.8	42.2	49.8	5.4	144.7	216.8	228.6
20. Savings Rate(%, AR)	5.6	5.4	5.9	6.0	5.9	5.6	5.7	5.6	5.6	5.3	30.5	37.1	-0.4	4.2	5.7	5.7

Table 5.

U. S. Federal Government Activity
for 1989-I and 1989-II with Forecasts for 1989-III through 1991-II

Georgia State University
College of Business Administration
Economic Forecasting Center
August 1989

	Period (Quarter Year)										Percentage Change			Annual Rate		
	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	87/88	88/89	89/90	1988	1989	1990
1. Government Receipts	1036.2	1051.5	1048.5	1070.0	1098.4	1117.7	1115.1	1140.5	1177.0	1198.8	6.7	8.1	6.3	972.5	1051.6	1117.9
2. Personal Tax & Nontax	446.8	464.2	455.4	463.8	475.7	488.9	480.7	490.5	505.3	520.5	1.7	10.8	5.8	413.0	457.6	484.0
3. Corporate Profits Tax	117.0	109.0	108.8	115.6	110.7	109.8	109.4	117.8	120.8	119.9	10.3	1.1	-0.6	111.4	112.6	111.9
4. Indirect Business Tax	58.0	58.5	59.0	59.6	60.2	61.2	61.8	62.5	64.1	64.8	5.5	3.6	4.5	56.8	58.8	61.4
5. Social Security Contr	414.3	419.8	425.3	431.0	451.8	457.8	463.2	469.7	486.8	493.6	11.6	8.0	9.0	391.3	422.6	460.6
6. Government Expenditures	1183.7	1197.8	1211.0	1239.7	1251.7	1263.5	1273.0	1307.9	1324.4	1332.6	4.2	8.0	5.5	1118.3	1208.1	1274.0
7. Purchases of Goods and Services	399.0	403.9	409.7	422.3	419.5	423.3	426.3	440.7	442.4	441.5	-0.1	7.2	4.6	381.3	408.7	427.5
8. Defense	298.7	302.4	304.0	306.3	311.4	312.8	314.4	316.6	322.0	324.2	1.1	1.6	3.6	298.0	302.9	313.8
9. Durables	82.7	82.1	83.5	84.6	84.9	84.5	86.3	86.8	85.7	86.1	-6.5	-0.8	2.9	83.9	83.2	85.6
10. Nondurables	10.8	12.1	12.0	11.9	12.0	12.4	12.2	12.5	12.3	12.8	3.8	7.3	4.9	10.9	11.7	12.3
11. Military Payroll	79.1	79.0	78.9	78.9	81.7	81.9	82.2	82.5	86.3	86.8	3.8	3.8	3.9	76.1	79.0	82.1
12. Civilian Payroll	40.0	40.4	40.5	40.7	42.8	42.8	42.7	42.8	44.8	45.0	4.6	8.5	5.9	37.3	40.4	42.8
13. Other Services	79.8	82.1	82.0	83.3	83.0	84.4	84.0	84.8	85.6	86.3	5.7	-1.3	2.8	82.9	81.8	84.1
14. Structures	6.3	6.8	7.1	6.9	7.0	6.8	7.0	7.2	7.3	7.2	-2.1	-3.9	3.3	7.1	6.8	7.0
15. Nondefense	100.4	101.5	105.7	116.0	108.1	110.5	111.9	124.1	120.4	117.3	-4.1	27.2	7.3	83.3	105.9	113.7
16. Durables	5.2	5.1	5.0	5.4	5.6	5.4	5.2	5.5	5.7	5.6	10.1	11.9	4.8	4.6	5.2	5.4
17. Nondurables	3.8	4.3	5.5	15.0	4.8	5.5	5.7	16.3	9.8	5.0				-8.2	7.2	8.1
18. CCC Inventory Chg	-3.8	-3.0	-1.3	7.6	-3.4	-2.5	-1.6	8.5	1.3	-3.6				-15.6	-0.1	0.3
19. Other Nondurables	7.6	7.2	6.8	7.4	8.2	8.0	7.3	7.8	8.5	8.6	12.1	-2.0	7.9	7.4	7.3	7.8
20. Compensation	49.2	49.7	50.0	50.1	52.2	53.0	53.6	53.7	56.1	56.8	9.8	7.9	6.8	46.1	49.8	53.1
21. Other Services	35.7	35.1	37.3	38.2	38.5	39.3	39.8	41.1	41.5	42.3	17.0	7.8	8.5	33.9	36.6	39.7
22. Structures	6.5	7.4	7.9	7.3	7.0	7.3	7.6	7.5	7.3	7.6	-19.4	6.2	1.0	6.9	7.3	7.4
23. Transfer Payments	460.4	467.9	472.8	482.5	494.9	500.5	507.2	518.1	528.7	534.1	5.8	7.5	7.3	438.3	470.9	505.2
24. Grants-In-Aid to State and Local Govt	118.7	118.9	119.5	119.9	123.6	124.0	124.8	125.3	129.2	130.0	8.6	7.1	4.3	111.4	119.3	124.4
25. Net Interest Paid	167.0	172.1	175.9	175.2	176.4	178.5	178.9	179.7	181.8	184.9	6.9	14.0	3.4	151.4	172.6	178.4
26. Deficit of Government Enterprises	38.5	35.0	33.1	39.6	37.3	37.2	35.8	44.1	42.3	42.1	10.4	1.6	5.6	36.0	36.6	38.6
27. Federal Surplus	-147.5	-146.3	-162.5	-169.5	-153.3	-145.8	-157.9	-167.4	-147.4	-133.8				-145.9	-156.5	-156.1
28. State and Local Surplus	48.8	46.8	43.0	42.9	42.6	43.8	42.3	45.0	50.0	51.6				49.7	45.4	43.4
29. Total Government Surplus	-98.7	-99.5	-119.5	-126.6	-110.7	-102.0	-115.6	-122.4	-97.4	-82.2				-96.2	-111.1	-112.7
30. Federal Debt held by Individuals	1900.4	1896.7	1940.2	1970.6	2017.5	2029.9	2071.3	2102.8	2148.1	2159.2	3.6	6.5	6.7	1808.7	1927.0	2055.4

Table 6.

Georgia State University
College of Business Administration
Economic Forecasting Center
August 1989

Selected Economic Variables in the U. S. Economy
for 1989-I and 1989-II with Forecasts for 1989-III through 1991-II

	Period (Quarter Year)										Percentage Change			Annual Rate		
	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	87/88	88/89	89/90	1988	1989	1990
PRIVATE ECONOMY - Annual Rate Changes in:																
1. Private Hourly Wage	5.4	5.4	5.3	5.7	6.4	5.7	5.8	5.6	6.1	5.6	4.8	5.4	5.8			
2. Output Per Worker Hour	1.1	-0.5	0.7	1.0	-1.0	0.4	0.2	0.8	-0.5	0.2	1.2	0.2	0.1			
3. Implicit Labor Cost	4.2	5.9	4.6	4.6	7.4	5.3	5.6	4.8	6.6	5.4	3.5	5.2	5.7			
4. Private Price Deflator	3.4	4.9	3.6	4.6	3.6	4.2	4.1	5.6	4.3	4.4	3.1	4.2	4.2			
PRICES																
5. Consumer Price Index	121.7	123.7	125.0	126.2	127.5	129.0	130.8	132.3	133.6	135.5	4.1	5.0	4.6	118.3	124.1	129.9
6. % Change (AR)	4.5	6.7	4.4	3.9	4.2	4.8	5.7	4.7	4.0	5.8						
7. Producer Price Index	110.4	112.1	112.3	112.9	114.6	116.1	117.0	118.0	120.0	121.7	3.6	5.3	4.0	106.3	111.9	116.4
(Industrial Commodities)																
8. % Change (AR)	11.0	6.4	0.6	2.2	6.2	5.3	3.1	3.5	7.0	5.8						
CORPORATE ECONOMY																
9. After Tax Profits	173.6	162.4	160.9	163.6	164.5	163.1	163.8	168.2	178.1	175.4	18.2	-2.2	-0.1	168.9	165.1	164.9
10. Inventory Profits	-38.3	-21.0	-18.1	-19.8	-27.3	-16.0	-23.8	-24.0	-29.1	-22.1				-25.0	-24.3	-22.8
11. Genuine Profits	171.9	173.1	171.1	170.3	161.6	169.4	161.0	163.9	166.8	170.3	8.0	-10.0	-4.4	190.7	171.6	164.0
12. Dow-Jones Index																
- Mean Closing	2274.0	2427.8	2556.4	2473.2	2216.8	2184.9	2217.4	2153.6	2293.6	2348.6	-9.5	18.1	-9.9	2060.8	2432.9	2193.2
13. New York Composite Index																
- Mean Closing	163.36	175.15	186.27	183.19	165.76	160.88	165.12	162.28	166.45	171.32	-7.3	18.1	-7.6	149.9	177.0	163.5
FINANCIAL																
14. Monetary Base	288.6	289.2	293.8	299.0	303.3	307.9	312.6	318.2	323.5	328.6	7.0	5.0	6.1	278.8	292.7	310.5
15. Checkable Deposits	572.2	559.2	564.0	572.2	577.7	588.4	598.6	608.9	619.7	629.6	2.8	-0.7	4.7	570.7	566.9	593.4
16. M1	786.7	775.8	783.2	794.4	803.7	818.4	831.8	846.4	861.5	875.7	4.3	1.2	5.1	776.0	785.0	825.1
17. Velocity of M1	6.456	6.651	6.687	6.710	6.707	6.688	6.664	6.684	6.672	6.675	3.3	6.1	0.9	6.246	6.626	6.686
18. M2	3071.2	3081.3	3136.1	3190.3	3237.2	3294.0	3352.5	3416.8	3479.2	3537.7	5.2	3.7	6.6	3009.4	3119.7	3325.1
19. Velocity of M2	1.654	1.674	1.670	1.671	1.665	1.662	1.654	1.656	1.652	1.652	2.5	3.5	-0.5	1.611	1.667	1.659
20. Federal Funds	9.44	9.73	9.11	8.73	8.13	7.83	7.76	7.95	7.54	7.48	13.7	22.3	-14.4	7.57	9.25	7.92
21. Prime Rate	10.98	11.36	10.63	10.28	9.64	9.50	9.50	9.50	9.36	9.00	13.6	16.1	-11.8	9.32	10.81	9.54
22. 6 Month T-Bills	8.58	8.33	7.73	7.78	7.38	7.15	7.02	7.14	6.81	6.75	14.6	17.3	-11.5	6.91	8.11	7.17
23. Seasoned AAA Corps	9.68	9.49	8.95	8.84	8.51	8.59	8.43	8.81	8.68	8.65	3.6	-4.8	-7.1	9.71	9.24	8.59
24. FHA Mortgage Rate	10.80	10.51	9.93	9.82	9.46	9.57	9.41	9.69	9.75	9.78	1.3	-0.7	-7.1	10.34	10.27	9.53
ADDITIONAL INDICATORS																
25. Housing Starts	1517	1351	1422	1449	1460	1481	1474	1478	1513	1529	-8.5	-4.0	2.7	1495	1435	1473
26. Single Family Starts	1070	994	1005	1026	1028	1035	1024	1035	1062	1051	-5.9	-5.9	0.7	1088	1024	1031
27. Unit Auto Sales	9.73	10.27	10.30	9.63	9.81	10.05	9.63	9.83	10.06	10.00	4.0	-6.2	-1.5	10.64	9.98	9.83
28. Civilian Employment	116.900	117.290	117.929	118.524	119.046	119.517	119.966	120.611	121.180	121.862	2.3	2.3	1.8	114.971	117.661	119.785
29. Unemployment Rate	5.2	5.3	5.2	5.1	5.1	5.1	5.2	5.1	5.1	5.1	-11.4	-5.5	-1.1	5.5	5.2	5.1
30. Industry Production Indx	140.7	141.4	141.8	143.2	142.7	143.6	143.0	145.5	146.4	148.1	5.7	3.3	1.4	137.2	141.8	143.7
31. Asset/Outlay Ratio	3.802	3.873	3.976	3.937	3.794	3.725	3.754	3.681	3.694	3.708	-10.5	1.4	-4.1	3.842	3.897	3.739

Table 7.

U. S. Foreign Trade Accounts
for 1989-I and 1989-II with Forecasts for 1989-III through 1991-II

Georgia State University
College of Business Administration
Economic Forecasting Center
August 1989

	Period (Quarter Year)										Percentage Change			Annual Rate		
	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	87/88	88/89	89/90	1988	1989	1990
MERCHANDISE TRADE (Not Seasonally Adjusted, Annual Rates)																
1. Merchandise Exports	351983	373757	363000	383240	385310	399560	394170	411030	418050	433080	26.3	14.7	8.0	320753	367995	397518
2. Food & Live Animals	30286	30459	29750	29940	30110	30460	31230	31560	32130	32720	37.6	14.0	2.4	26415	30109	30840
3. Beverages & Tobacco	5380	4990	4950	5470	5720	5360	5170	5650	5880	5540	23.0	14.3	5.3	4548	5197	5475
4. Crude Materials	27908	26975	24970	25560	26130	26000	24860	25520	26840	26990	20.8	5.0	-2.8	25099	26353	25628
5. Mineral Fuels	8537	10109	9960	10890	9960	10280	10150	11360	10970	11520	3.4	20.6	5.7	8186	9874	10438
6. Animal & Vegetable Oil	1370	1265	1350	1280	1210	1160	1230	1260	1330	1300	49.6	-9.5	-7.7	1454	1316	1215
7. Chemicals	34612	40407	42230	41000	42830	44320	45840	43760	46220	47990	21.3	22.5	11.7	32300	39562	44188
8. Manufactured Goods	25887	27722	29120	30060	30170	32050	32980	33850	34260	35890	31.5	23.4	14.4	22845	28197	32263
9. Machinery, Trnspt. Eq.	140490	152236	145530	157830	155620	163430	156240	168220	167940	175580	23.7	10.3	8.0	135135	149022	160878
10. Misc. Manufacturing	30246	31937	32270	33000	33900	35500	35980	36920	37840	39460	25.3	30.0	11.6	24514	31863	35575
11. Commodities, n.e.c.	33275	33836	29420	33250	35210	36220	35840	37720	39460	40150	41.5	16.9	11.7	27765	32445	36248
12. Foreign Merchandise	13993	13822	13450	14960	14450	14780	14650	15210	15180	15940	36.6	12.5	5.1	12493	14056	14773
13. Merchandise Imports	453478	469755	467876	488057	481887	498643	493550	514556	511875	529990	8.6	6.5	5.8	441101	469791	497159
14. Food & Live Animals	21952	20969	20680	21900	22750	21350	20950	22430	23320	22650	-3.4	7.3	2.3	19927	21375	21870
15. Beverages & Tobacco	3937	4153	4450	5160	4240	4630	4930	5540	4630	5020	2.7	6.9	9.3	4139	4425	4835
16. Crude Materials	15751	15943	15630	15480	16790	17160	16420	17010	18360	18520	16.9	17.2	7.3	13396	15701	16845
17. Mineral Fuels	45631	56978	55486	55272	55347	62983	64245	65156	64990	70390	-8.2	29.8	16.1	41088	53342	61933
18. Animal & Vegetable Oil	704	604	610	590	550	570	635	650	665	660	50.9	-26.2	-4.1	849	627	601
19. Chemicals	21864	20653	20850	21430	22350	21460	21320	21460	22250	21970	22.5	6.7	2.1	19875	21199	21648
20. Manufactured Goods	62593	62972	64750	65220	65530	65420	65920	66020	66430	67000	16.6	3.6	2.9	61636	63884	65723
21. Machinery, Trnspt. Eq.	201340	211300	202550	220410	215560	225940	213680	230460	225610	236610	10.4	6.0	6.0	197053	208900	221410
22. Misc. Manufacturing	66802	62742	68420	67560	64520	64250	69920	69820	70230	70950	8.6	-5.8	1.1	70465	66381	67128
23. Commodities, n.e.c.	12904	13440	14450	15035	14250	14880	15530	16010	15390	16220	2.1	10.1	8.7	12672	13957	15168
FOREIGN TRANSACTIONS - GNP ACCOUNTS (Seasonally Adjusted, Annual Rates)																
24. Total Exports	605.6	625.2	635.3	652.5	666.3	679.9	694.2	707.7	725.3	741.3	21.5	15.0	9.1	547.7	629.7	687.0
25. Mdse Exports	358.7	370.9	373.0	383.2	390.3	397.6	404.2	411.0	423.1	433.1	26.4	15.4	7.9	322.0	371.5	400.8
26. Factor Income	131.9	136.9	140.8	145.6	150.1	154.3	158.4	162.9	166.1	169.9	16.3	18.9	12.7	116.8	138.8	156.4
27. Other Services	115.1	117.4	121.5	123.7	125.9	128.0	131.6	133.8	136.1	138.3	11.8	9.6	8.7	109.0	119.4	129.8
28. Total Imports	659.6	677.5	682.7	697.9	711.5	724.4	730.0	746.1	764.3	778.4	11.5	9.4	7.1	621.3	679.4	728.0
29. Mdse Imports	469.8	479.8	478.4	488.1	496.9	503.6	503.6	514.6	526.9	535.0	8.8	7.3	5.4	446.5	479.0	504.7
30. Factor Income	97.3	101.3	104.6	108.9	112.3	116.3	119.6	123.2	127.5	131.4	31.9	23.5	14.4	83.5	103.0	117.9
31. Other Services	92.5	96.5	99.7	100.9	102.3	104.5	106.8	108.3	109.9	112.0	8.1	9.7	8.3	88.8	97.4	105.5
32. Net Transfer Payments	13.8	14.4	15.2	21.0	14.1	14.0	15.9	21.5	14.5	14.6	2.8	9.2	-1.7	14.8	16.1	16.4
33. Government Interest	32.5	34.0	35.2	36.4	38.1	39.7	41.0	42.6	44.0	45.5	14.8	18.7	16.9	29.1	34.5	40.4
34. Net Foreign Investment	-100.3	-100.7	-97.8	-102.8	-97.4	-98.2	-92.7	-102.5	-97.5	-97.2	----	----	----	-117.4	-100.4	-97.7
35. Trade Weighted Value of Dollar (3/73 = 100)	96.0	100.2	97.1	94.8	95.6	93.1	91.8	89.3	89.9	90.3	-4.3	4.6	-4.7	92.8	97.0	92.5

Table 8.

Personal Consumption Expenditure Implicit Price Deflators
for 1989-I and 1989-II with Forecasts for 1989-III through 1991-II

Georgia State University
College of Business Administration
Economic Forecasting Center
August 1989

	Period (Quarter Year)										Percentage Change			Annual Rate		
	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	87/88	88/89	89/90	1988	1989	1990
1. Durable Goods	111.2	111.0	111.5	112.2	112.6	113.3	114.0	115.0	115.7	116.6	1.9	1.3	2.0	110.1	111.5	113.7
2. Percent Change(AR)	0.3	-0.9	1.9	2.6	1.5	2.4	2.4	3.5	2.4	3.2						
3. Automobiles	120.2	120.4	120.9	122.2	122.8	123.4	124.4	125.6	126.6	127.9	2.0	2.4	2.6	118.1	120.9	124.1
4. Percent Change(AR)	3.4	0.5	1.6	4.6	1.9	2.0	3.1	4.1	3.2	4.1						
5. Furniture	98.5	97.4	97.6	97.5	97.4	97.5	97.8	98.0	97.9	98.1	0.4	-0.6	-0.1	98.3	97.7	97.7
6. Percent Change(AR)	-1.7	-4.2	0.9	-0.5	-0.4	0.4	1.1	1.0	-0.4	0.7						
7. Other Durables	120.8	121.8	123.0	124.5	125.9	127.6	129.1	130.6	132.3	134.1	5.0	4.5	4.7	117.3	122.6	128.3
8. Percent Change(AR)	3.3	3.6	4.0	4.9	4.6	5.3	4.8	4.8	5.3	5.7						
9. Nondurables	120.0	123.3	123.7	124.7	126.0	127.6	128.7	130.2	131.7	133.3	3.8	5.7	4.2	116.3	122.9	128.1
10. Percent Change(AR)	6.2	11.2	1.3	3.4	4.2	5.2	3.6	4.6	4.8	4.9						
11. Food	126.0	128.3	129.2	130.5	131.8	133.3	134.8	136.2	137.8	139.3	4.1	5.6	4.3	121.7	128.5	134.0
12. Percent Change(AR)	5.9	7.6	2.7	4.1	4.1	4.6	4.6	4.2	4.8	4.4						
13. Apparel	118.2	119.9	118.8	120.7	121.2	122.8	122.3	123.8	124.5	125.9	4.3	3.1	2.6	115.8	119.4	122.5
14. Percent Change(AR)	1.3	6.1	-3.7	6.5	1.5	5.4	-1.6	5.1	2.3	4.5						
15. Gasoline and Oil	79.8	92.8	92.0	90.6	91.8	93.5	95.0	95.9	97.7	99.5	0.8	12.3	6.0	79.0	88.7	94.0
16. Percent Change(AR)	4.1	82.6	-3.5	-6.0	5.7	7.4	6.5	4.0	7.9	7.3						
17. Fuel Oil	77.9	80.2	79.7	79.0	80.5	81.8	82.9	84.6	86.4	87.9	0.9	2.6	4.1	77.2	79.2	82.4
18. Percent Change(AR)	11.8	12.0	-2.3	-3.4	7.6	6.9	5.3	8.3	9.2	6.9						
19. Other Nondurables	135.1	137.2	138.8	140.2	141.9	143.5	145.2	146.9	148.7	150.6	4.4	5.7	4.8	130.4	137.8	144.4
20. Percent Change(AR)	7.2	6.3	4.8	4.0	4.9	4.7	4.8	4.8	5.0	5.2						
21. Services	139.0	140.4	141.8	143.6	145.4	147.2	149.0	151.3	153.2	155.3	4.6	4.6	5.0	134.9	141.2	148.2
22. Percent Change(AR)	5.2	4.0	4.0	5.2	5.2	4.9	4.9	6.4	5.1	5.8						
23. Housing	140.7	142.0	143.2	144.6	146.2	147.7	149.3	151.0	152.8	154.8	4.9	4.2	4.1	136.9	142.6	148.6
24. Percent Change(AR)	3.9	3.6	3.5	3.9	4.5	4.1	4.4	4.7	4.9	5.3						
25. Electricity and Gas	116.0	116.3	116.8	118.8	119.9	120.7	121.2	123.5	124.8	125.8	0.7	3.4	3.7	113.1	117.0	121.3
26. Percent Change(AR)	3.4	1.2	1.8	6.9	3.6	2.8	1.8	7.8	4.1	3.5						
27. Other Household Opns	130.0	131.1	131.8	132.9	133.9	134.8	136.0	136.9	138.6	139.6	2.2	2.8	3.0	127.8	131.4	135.4
28. Percent Change(AR)	1.9	3.4	2.2	3.2	3.3	2.7	3.5	2.6	5.0	2.9						
29. Transportation	129.2	130.0	131.2	133.0	135.0	137.0	139.0	141.3	143.4	146.0	7.6	2.3	5.5	127.9	130.8	138.1
30. Percent Change(AR)	9.4	2.5	3.8	5.5	6.4	5.8	6.0	6.8	6.2	7.3						
31. Medical Care	149.6	151.6	153.9	156.6	159.4	162.1	165.0	168.0	171.1	174.4	6.8	6.8	7.0	143.2	152.9	163.6
32. Percent Change(AR)	7.2	5.4	6.3	7.2	7.3	6.9	7.4	7.5	7.6	8.0						
33. Other Services	138.7	140.1	141.3	142.9	144.5	146.1	147.5	149.4	151.2	153.0	3.8	3.7	4.3	135.8	140.8	146.9
34. Percent Change(AR)	3.9	4.0	3.5	4.6	4.5	4.5	3.9	5.3	4.9	4.8						

Table 9.

Gross National Product Implicit Price Deflators
for 1989-I and 1989-II with Forecasts for 1989-III through 1991-II

Georgia State University
College of Business Administration
Economic Forecasting Center
August 1989

	Period (Quarter Year)										Percentage Change			Annual Rate		
	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	87/88	88/89	89/90	1988	1989	1990
1. Gross National Product	124.5	126.0	127.1	128.5	129.8	131.1	132.5	134.2	135.8	137.2	3.3	4.4	4.2	121.3	126.5	131.9
2. Percent Change(AR)	4.0	4.9	3.5	4.5	4.1	4.1	4.3	5.2	4.9	4.2						
3. Personal Consumption	128.0	129.8	130.8	132.2	133.7	135.2	136.7	138.5	140.0	141.8	3.9	4.6	4.5	124.5	130.2	136.0
4. Percent Change(AR)	4.8	5.7	3.1	4.4	4.6	4.6	4.5	5.4	4.4	5.2						
5. Consumer Price Index	121.7	123.7	125.0	126.2	127.5	129.0	130.8	132.3	133.6	135.5	4.1	5.0	4.6	118.3	124.2	129.9
6. Percent Change(AR)	4.7	6.7	4.3	3.9	4.2	4.8	5.7	4.7	4.0	5.8						
7. Private Domestic Invest	106.7	107.9	109.3	110.5	110.7	111.5	112.4	113.9	114.6	115.4	1.0	3.6	3.2	104.8	108.6	112.1
8. Percent Change(AR)	2.1	4.6	5.1	4.6	0.7	2.8	3.4	5.5	2.5	2.9						
9. Structures	119.5	120.9	122.2	123.6	125.0	126.5	128.1	129.6	131.3	132.9	5.0	5.8	4.7	114.9	121.6	127.3
10. Percent Change(AR)	7.7	4.8	4.4	4.7	4.6	4.9	5.2	4.8	5.4	5.0						
11. Producer's Durables	94.4	94.1	94.4	95.7	95.2	95.5	96.6	98.1	97.8	98.0	0.1	1.4	1.8	93.3	94.7	96.4
12. Percent Change(AR)	-3.3	-1.3	1.3	5.6	-2.1	1.3	4.7	6.4	-1.2	0.8						
13. Residential Structures	122.1	124.1	125.7	126.6	127.9	129.4	130.8	132.4	134.0	135.5	3.0	4.1	4.4	119.8	124.6	130.1
14. Percent Change(AR)	5.8	6.7	5.3	2.9	4.2	4.8	4.4	5.0	4.9	4.6						
15. Exports	106.3	106.9	107.4	108.0	108.8	110.0	111.1	112.1	113.2	114.4	3.8	3.8	3.1	103.3	107.2	110.5
16. Percent Change(AR)	4.6	2.3	1.9	2.3	3.0	4.5	4.1	3.6	4.0	4.3						
17. Imports	105.6	106.2	106.4	107.1	108.1	109.3	110.4	111.6	112.9	114.2	3.7	3.5	3.3	102.7	106.3	109.9
18. Percent Change(AR)	6.3	2.3	0.8	2.7	3.8	4.5	4.1	4.4	4.7	4.7						
19. Federal	118.9	118.4	118.7	121.0	122.8	123.1	123.6	125.8	129.2	129.6	3.1	2.9	3.8	115.9	119.3	123.8
20. Percent Change(AR)	2.4	-1.7	1.0	8.0	6.1	1.0	1.6	7.3	11.3	1.2						
21. Federal Purchases	110.4	109.3	109.9	113.7	113.2	113.4	113.9	117.5	119.0	119.0	2.0	1.8	3.3	108.9	110.8	114.5
22. Percent Change(AR)	-8.0	-3.8	2.3	14.6	-1.9	0.7	1.9	13.1	5.2	0.1						
23. Federal Value Added	133.1	133.7	133.8	133.8	139.0	139.7	140.1	140.2	146.3	147.2	4.2	5.0	4.6	127.2	133.6	139.8
24. Percent Change(AR)	18.0	1.8	-0.3	0.0	16.5	2.0	1.2	0.3	18.6	2.5						
25. State & Local	132.9	134.5	136.1	137.7	139.4	141.0	142.7	144.4	146.1	147.8	4.5	5.0	4.9	128.8	135.3	141.9
26. Percent Change(AR)	6.6	4.9	4.8	4.8	5.0	4.7	4.9	4.9	4.8	4.7						
27. State/Local Purchases	121.2	122.7	123.9	125.2	126.6	128.1	129.5	130.9	132.5	134.0	3.6	5.0	4.5	117.4	123.3	128.8
28. Percent Change(AR)	8.3	5.0	3.9	4.2	4.7	4.9	4.4	4.5	4.7	4.8						
29. State/Local Value Added	142.6	144.4	146.2	148.1	150.0	151.7	153.7	155.7	157.6	159.4	5.5	5.3	5.1	138.1	145.3	152.8
30. Percent Change(AR)	5.5	5.1	5.1	5.3	5.2	4.6	5.4	5.3	5.0	4.6						

Table 10.

Details of Private Consumption in the U. S.
for 1989-I and 1989-II with Forecasts for 1989-III through 1991-II

Georgia State University
College of Business Administration
Economic Forecasting Center
August 1989

	Period (Quarter Year)										Percentage Change			Annual Rate		
	I 89	II 89	III 89	IV 89	I 90	II 90	III 90	IV 90	I 91	II 91	87/88	88/89	89/90	1988	1989	1990
Current Dollars																
1. Durable Goods	466.4	470.3	470.5	469.4	473.0	479.7	476.5	486.6	494.6	500.3	8.1	3.1	2.1	455.2	469.2	479.0
2. Autos, Trucks & Parts	211.7	213.3	213.2	210.6	213.3	218.8	215.4	222.1	228.4	230.6	8.2	0.3	2.5	211.6	212.2	217.4
3. Furniture	172.1	173.3	172.4	171.5	171.8	171.6	171.4	172.3	173.2	174.2	8.6	6.4	-0.3	162.0	172.3	171.8
4. Other	82.6	83.7	84.9	87.3	87.9	89.3	89.7	92.2	93.0	95.5	6.7	3.7	6.1	81.6	84.6	89.8
5. Nondurable Goods	1098.3	1116.6	1128.6	1141.6	1158.6	1175.7	1191.7	1208.7	1228.7	1248.4	5.4	6.6	5.6	1052.3	1121.3	1183.7
6. Food	587.3	588.6	596.1	603.9	613.0	621.9	631.0	638.9	649.5	658.2	5.8	6.1	5.4	559.7	594.0	626.2
7. Clothing & Shoes	195.0	198.5	199.6	202.9	204.4	206.6	207.1	209.2	212.4	216.4	5.4	6.5	3,9	186.8	199.0	206.8
8. Gasoline & Oil	77.9	88.7	88.2	87.3	88.8	90.3	92.3	93.5	95.1	96.9	2.1	11.4	6.7	76.8	85.5	91.2
9. Fuel Oil & Coal	18.7	20.2	20.4	20.7	20.6	20.7	21.3	21.9	22.3	22.5	10.8	2.6	5.6	19.5	20.0	21.1
10. Other	219.4	220.7	224.3	226.8	231.8	236.2	240.0	245.2	249.4	254.4	5.3	6.3	7.0	209.5	222.8	238.3
11. Services	1816.7	1851.0	1884.6	1922.0	1959.6	1998.2	2036.0	2080.4	2118.9	2162.1	8.5	8.2	8.0	1727.6	1868.6	2018.6
12. Housing	520.2	527.5	534.6	542.4	551.2	559.6	568.6	578.2	588.3	599.2	7.2	5.9	6.3	501.4	531.2	564.4
13. Utilities	93.6	94.8	97.8	99.2	100.8	102.1	103.4	105.0	106.8	108.6	5.7	2.9	6.7	93.7	96.4	102.8
14. Other	107.5	108.8	109.8	111.2	112.5	113.8	115.2	116.5	118.2	119.6	6.7	5.2	4.7	104.0	109.3	114.5
15. Transportation	124.4	125.7	127.4	129.9	132.2	134.5	136.9	139.3	141.7	144.5	13.4	5.0	7.0	120.8	126.9	135.7
16. Medical Care	432.3	442.9	454.6	467.6	480.2	493.5	506.8	520.4	534.8	549.5	11.4	12.8	11.3	398.3	449.4	500.2
17. Other	538.7	551.3	560.4	571.7	582.7	594.7	605.1	618.0	629.1	640.7	8.1	8.4	8.0	512.4	555.5	600.1
Constant Dollars																
18. Durable Goods	419.3	423.8	422.0	418.3	419.9	423.3	418.0	423.2	427.6	429.1	6.1	1.8	0.1	413.6	420.9	421.1
19. Autos, Trucks & Parts	176.1	177.2	176.4	172.3	173.7	177.3	173.2	176.8	180.4	180.3	6.1	-2.1	-0.1	179.2	175.5	175.3
20. Furniture	174.8	177.9	176.6	175.9	176.4	176.0	175.3	175.8	176.9	177.6	8.2	7.0	-0.2	164.8	176.3	175.9
21. Other	68.4	68.7	69.0	70.1	69.8	70.0	69.5	70.6	70.3	71.2	1.6	-0.8	1.3	69.6	69.1	70.0
22. Nondurable Goods	915.0	905.8	912.5	915.3	919.5	921.4	925.7	928.4	932.7	936.3	1.6	0.8	1.3	904.5	912.2	923.8
23. Food	466.0	458.6	461.4	462.8	465.1	466.6	468.1	469.1	471.3	472.5	1.6	0.5	1.1	460.0	462.2	467.2
24. Clothing & Shoes	165.0	165.5	168.0	168.1	168.7	168.3	169.4	169.0	170.6	171.9	1.1	3.3	1.3	161.4	166.7	168.9
25. Gasoline & Oil	97.6	95.6	95.9	96.4	96.7	96.6	97.2	97.5	97.3	97.4	1.3	-0.8	0.6	97.1	96.4	97.0
26. Fuel Oil & Coal	24.0	25.2	25.6	26.2	25.6	25.3	25.7	25.9	25.8	25.6	9.8	0.0	1.5	25.3	25.3	25.6
27. Other	162.4	160.9	161.6	161.8	163.4	164.6	165.3	166.9	167.7	168.9	0.9	0.6	2.1	160.7	161.7	165.1
28. Services	1306.7	1318.5	1329.4	1338.7	1347.6	1357.7	1366.9	1375.1	1383.4	1392.0	3.8	3.4	2.9	1280.2	1323.3	1361.8
29. Housing	369.6	371.5	373.3	375.1	377.0	378.9	380.9	382.9	385.0	387.1	2.1	1.7	2.0	366.1	372.4	379.9
30. Utilities	80.7	81.5	83.7	83.5	84.1	84.6	85.3	85.0	85.6	86.3	4.9	-0.5	2.9	82.8	82.4	84.8
31. Other	82.7	83.0	83.3	83.7	84.0	84.4	84.7	85.1	85.3	85.7	4.4	2.3	1.7	81.3	83.2	84.6
32. Transportation	96.3	96.7	97.1	97.7	97.9	98.2	98.5	98.6	98.8	99.0	5.4	2.6	1.4	94.5	97.0	98.3
33. Medical Care	289.0	292.2	295.4	298.6	301.3	304.5	307.2	309.8	312.6	315.1	4.3	5.6	4.1	278.2	293.8	305.7
34. Other	388.3	393.5	396.6	400.1	403.3	407.1	410.3	413.7	416.1	418.8	4.2	4.6	3.5	377.4	394.6	408.6

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